

THE LIGHT
and
THE FLAME

Modern Knowledge and Religion

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THE LIGHT and THE FLAME

Modern Knowledge and Religion

Edited by

R. C. CHALMERS

and

JOHN A. IRVING



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To
LORNE PIERCE

FOREWORD

CHRISTIANITY may be described as the last great creative achievement of the classical culture of Greece and Rome: the Christian Church is the only institution that survived the collapse of the Roman Empire and came through to the present day. Following the decay of classical culture the Christian religion remained for a thousand years the dominant theme of medieval culture. What is the relationship between religion and modern thought?

During the past four hundred years the advance of science has profoundly changed our conception of the nature of the universe, the nature of man, and the nature of society. The impact of the scientific outlook has given modern thought a very different texture than ancient and medieval thought possessed.

In the present volume, seven Canadian scientists and scholars have discussed significant developments during the last fifty years in the sciences, philosophy, and theology. Although not explicitly stated in every chapter, the book as a whole is animated by a desire to depict science, philosophy, and religion as interwoven themes. The religious thought of our time cannot be understood apart from its scientific, philosophical, and social milieu.

A desire to interpret religion in the light of modern thought has guided especially the author of the last chapter of the book, appropriately entitled, "True and Substantial Wisdom." It must be emphasized that this chapter was not written in a theological vacuum: it presupposes a knowledge of the preceding chapters in the book.

What problems raised by recent developments in science and philosophy are the special concern of contemporary theologians? Turning first to the natural sciences we find that organized activity in these fields has given us a new awareness of the vastness and complexity of the universe. Confronted with the universe, not as it is experienced in the calm, clear beauty of a star-lit night, but as it is presented by contemporary astronomers, what can the theologian say of God and Immortality?

During the last decade remarkable advances in our knowledge of Nature have been accompanied by universal fear of the potentially destructive power of nuclear weapons. William Faulkner has said that the question uppermost in the mind of modern man is: "When will I be blown up?" What is the theologian's answer to such widespread questions as: "Why be concerned about what is ultimate?" "Does anything really matter?" "Should we not live for today and forget about tomorrow?" To these questions, and others, theology must have adequate answers if it is to minister to man's condition today.

The task of contemporary theologians is made increasingly difficult by the twentieth century adulation of science. There has developed an attitude to science which has been called scientism, a pseudo-religion, all embracing in its reference. Scientism claims that the only knowledge we do or can have must be provided by the use of scientific methods. Such an attitude encourages the belief that the only solution for any problem—from sex to semantics—is to be found by the application of scientific techniques.

The author of Chapter VII accepts gratefully all that science has accomplished in solving human problems and in providing a more abundant life. But he insists that Christianity and scientism are antithetical to one another. For Christianity God, and not science, is man's ultimate concern. Any attitude to life that is not God-centred is contrary to the Christian faith and to the highest aspirations of humanity.

But quite apart from scientism, the modern mind is puzzled by apparent contradictions between the claims of science and religion. The findings of science are said to be merely tentative, whereas

theology teaches eternal verities. Then, too, the scientist says that his approach is objective (or at any rate, relatively objective), whereas religion calls for involvement, for subjective commitment.

Again, the technological achievements of science have caused us to become more and more machine-minded. It is becoming increasingly difficult to think of either God or ourselves except in mechanical terms—pulling levers, pushing buttons, adjusting this or that. A truly personal relationship between God and man, or even man and man, is slowly fading away, like Alice's Cheshire cat. Machine-mindedness is one of the most powerful factors warring against a religious approach to reality. The "I-Thou" relationship of faith is being supplanted by the "I-it" attitude of mechanistic science.

The influence of science has resulted, therefore, not so much in causing people deliberately to deny God, as in so moulding modern thought that God has become an unnecessary irrelevance. If science alone can give us complete knowledge and complete control of nature, man, and society, what possible reality or function can be assigned to the realm of spirit? To all of these questions concerning the influence of science on man's thought and conduct, theology must address itself if it would gain a hearing in the modern world.

Turning to the social milieu of the present age we find that man has little sense of the unity of life: the individual lives in a compartmentalized world, working in his own specialized field or profession, knowing almost nothing of other areas of human experience. As Dr. Murray Ross emphasizes in the fourth chapter of this book, "man today is socially impoverished, politically impotent, and spiritually all but dead." Under such conditions, life has little meaning, human relationships little depth or significance, and the individual's voice hardly any importance in the affairs of his work or community. Man is seeking desperately for something which will enable him to forget, however briefly, the meaninglessness of his existence.

The dilemma confronting people who desire true community without finding it presents problems not only for social workers and mental health experts but also for theologians. Unless it can deal

constructively with this dilemma, theology will not be heard by our generation. Nor can a theology too individualistic in its reference meet the needs of today: such a theology has no real place for one's brethren with whom true community must be created.

A second important factor in our social milieu is the steadily increasing power of the state. Totalitarianism is a disease of the twentieth century. But it is fallacious to suppose that this attitude is confined to fascist or communist countries, for similar tendencies may be found also in democracies—the difference is largely a matter of degree. The individual, lost in the mass, feeling inconsequential in the face of political power, is becoming more and more willing for the state to exercise control over ever larger areas of his life. The Christian can give unqualified allegiance only to God, never to the state. If it would save man from the shackles of state control, theology must distinguish clearly between the things that are, and are not, Caesar's.

Turning from the social to the intellectual milieu of the present age, the theologian encounters three philosophical movements that give him special concern: logical analysis, atheistic existentialism, and dialectical materialism.

The origins, presuppositions, and methods of logical analysis, the dominant philosophical tendency in the Anglo-American world today, are discussed in the fifth chapter of this book. According to this approach, philosophy can be nothing more than a fight against the fascination that forms of expression exert over us. The only proper function of the philosopher is the analysis of propositions, or, as it is now called in England, linguistic analysis. Devotees of this school usually repudiate traditional metaphysics as meaningless nonsense.

Logical analysis leads to what the author of Chapter V describes as "syntactical mysticism," in which the inexpressible can be "*shown*," although it cannot be "*said*." For the theologian, this type of mysticism lacks content. It is far removed from the mysticism of a Plato contemplating the eternal Ideas, or of a Saint Paul rejoicing in the reality of the indwelling Christ. The retreat to syntactical mysticism is intellectually a last ditch stand.

Philosophy's necessity is theology's opportunity. If logical analysts renounce their right to treat the great problems, there is opened up for theologians a challenging and unprecedented opportunity to explain the ways of God and the rational order of the world. The theologian today has a two-fold task: to develop a systematic body of Christian doctrine, and to relate that doctrine to the problems of creation and life. If the logical analyst leaves man with a question mark over everything, can the theologian so wrestle with the intellectual and spiritual problems of today as to leave him with an exclamation mark over life?

A second intellectual current in the present climate of opinion which theology must consider is nihilism, of which the best known representative is the atheistic existentialist, Jean-Paul Sartre. Leading out from the proposition that existence comes before essence, Sartre teaches that there are no norms, no ultimates, no God. Man is free naturally: as his body tells him he is free, he must not deliberate but act. Man is nothing but what he makes himself: religious faith is a mere fabrication of the darkened intellect. It follows that "only the man who chooses freely to be himself, who makes himself, who is his own work, can truly be said to exist." Abstract thought, concern about traditions, principles, values, are merely the marks of a man who has no real freedom and is, therefore, not truly a man.

The third philosophical movement of special concern to the theologian today is the dialectical materialism of Karl Marx, a philosophy that enjoys the official support of communist parties throughout the world. Here, again, the theologian encounters a system of thought that is avowedly atheistic, that denigrates man's spiritual nature, that depicts material forces as the dominant factors in human life.

The syntactical mysticism of logical analysis, the nihilism of atheistic existentialism, and the complexity and subtlety of the appeal of dialectical materialism each present an unequivocal challenge to contemporary theology. The last chapter of this book has been written with an awareness of the religious implications of these philosophical movements.

The theologian can testify effectively to religious truth only if he understands the scientific, social, and intellectual tendencies of his age. He must formulate religious beliefs in a manner that not only meets the challenge offered by these tendencies but also redirects them into proper channels. This book is offered as a contribution to a great enterprise.

*St. Andrew's College,
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—R. C. C.

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—J. A. I.

June, 1956.

CONTENTS

CHAPTER		PAGE
	FOREWORD	v
	The Editors	
I	THE UNIVERSE AROUND US Helen Sawyer Hogg	1
II	MAN IN THE UNIVERSE Archibald G. Huntsman	22
III	MODERN PSYCHOLOGY AND RELIGION W. S. Taylor	43
IV	MAN AND HIS LACK OF COMMUNITY Murray G. Ross	65
V	LOGICAL ANALYSIS AND MYSTICISM John A. Irving	85
VI	CHRISTIANITY AND CONTEMPORARY SOCIAL THOUGHT John Webster Grant	105
VII	"TRUE AND SUBSTANTIAL WISDOM" R. C. Chalmers	119

I

The Universe Around Us

HELEN SAWYER HOGG

THE WORLD of the physical sciences has unfolded with extraordinary rapidity in the last century and a half, adding incredible richness to the intellectual life of man. The picture of our understanding of the universe can now be painted with bolder strokes. We can go from the infinitely small—the atomic particles—to the infinitely great—clusters of galaxies which extend in space as far as our telescopes can penetrate. Once thought the fundamental unit of matter, atoms are now found to consist of more than twenty separate particles. Galaxies, once considered relatively small masses of gas near us, are now known to be systems of millions of stars which, with present equipment, can be observed to distances as great as 3,000 million light years.

How far we have come, in this middle period of the twentieth century, from the days when an Italian nobleman refused to look through Galileo's telescope because he feared that he would believe what he saw! In laboratories and observatories, and deep under the sea and high in the air, scientists hunt for more clues to the understanding of our universe. With all the hunt, however, the age-old majesty of the universe remains. For practical reasons the modern astronomer may wear an electrically heated suit for observing on bitter cold winter nights, but his view of the stars will bring the same feeling of reverence as caused Tycho Brahe four

centuries ago to don his court robes when making observations of the heavens. The beauty of the universe never diminishes. It increases with the years a scientist studies. It is well said that "The undevout astronomer is mad."

It may be true that science is ethically neutral, and can offer us only technical guidance. However, it also offers us vistas and horizons which are a challenge to the mind of twentieth-century man to comprehend and interpret.

THE EARTH

All physical sciences have a common meeting ground in their interest in the earth. Geology and its various branches portray for us the physical make-up of the earth, though much still remains to be determined.

The air which surrounds our earth to a height of some hundreds of miles makes life possible. The actual crust of the earth, on which we live and move, is a thin skin of only a few miles in depth. Beneath this skin the materials for the inner earth are arranged in concentric shells, something like an onion. Each shell has a sharp boundary, and the density increases progressively with the deeper layers, up to many times the density of water. The interior probably consists largely of the iron group of elements, chromium, manganese, iron, cobalt, and nickel. The study of earthquake waves yields knowledge of the inner structure of the earth.

The actual temperature of the interior is still unknown. Nor do we know whether the earth has been cooling off from the time of its creation, or whether it is even now warming up from the radioactive material in the core. The deepest man-made borings on the surface go down less than 5 miles. During the millions of years that a record of the earth's history can be read, the heat which it has received from the sun seems not to have varied by a very wide margin. The Ice Ages at once come to mind, but a relatively small temperature change could cause these. A change in mean temperature of only a few degrees over the surface of the earth will change the distribution of the ice by thousands of miles.

The cause of the Ice Ages, one of the most important events in the recent history of the earth, is still unknown, though there are numerous theories. Not yet answered is the problem whether the cause was from outside the earth, or was connected with the earth. Did a great cloud of dust and gas cut down the heat of the sun as seen from earth? A prevalence of comets a million years ago has been suggested with the dust from their disintegration blocking sunlight from the earth. Or did an abnormal amount of volcanic activity hurl countless tons of the earth's own dust into the upper air, and thereby reduce the sunlight reaching the surface? Or was the cause a toppling of the earth on its axis, a change in its orientation—the polar-wander theory? The final answers to this important problem, one which can have much bearing on the history of the earth in the future, are still to be given.

We do have now, however, a fair idea of the age of the earth. It is a much greater age than was conceded in the early years of this century. The past few years have seen a remarkable accomplishment in the science of dating, whether for intervals of a few thousand years (carbon dating) or intervals of hundreds of millions of years (the heavier radioactive elements). From ratios of uranium to lead or to helium (since the decay is dependent on time alone) the oldest rocks are found to be of the order of 3,000 million years. These include the pre-Cambrian shield in Canada and in Russia. The age of the earth as a planet is now considered of the order of 4,000 million years. It may be older than this, but not by a large factor. In the various parts of the universe for which one is able to determine some sort of time scale, there is a remarkable uniformity in the upper limit of age. At present there is no indication of anything older than about six or seven thousand million years.

The problem of the origin of the earth is still not settled. The formation of the earth is linked with that of the whole solar system. Indeed it may prove eventually to be related to the creation of the entire universe. Theories of the formation of the solar system come and go. There appear to be three possible origins for the material which now constitutes our earth and the other planets. It may

originally have been part of our sun, and torn off by a passing star. It may have belonged to another star which came too close to the sun, and from which, by tidal action, the sun wrenched material. Or it may have been part of a great cosmic cloud of matter out of which the sun and planets all condensed. By means of various eddies set up in the primordial matter, the planets slowly grew by accretion. Such a process can be worked out mathematically, as has been done by von Weizsäcker, Hoyle, and Kuiper. At the present time arguments favour this latter theory, especially because today we can actually observe stars condensing and being formed out of such cosmic clouds.

The problem of the origin of the earth and the other planets is of enormous importance in our attempt to prophesy the number of planetary systems in the universe. Even the nearest star is so far away that our telescopes at present could not show a large planet like Jupiter associated with it. Since life is impossible on a star, it is of great interest to us to know how many planets there are likely to be in space. Is the formation of a solar system a usual event in the life history of a star? Or is it so rare that very few such systems exist? The first hypothesis seems more likely at present. It is very possible that untold and as yet unseen myriads of planets are circling other stars.

THE ATOM

In our comprehension of the universe modern physics and chemistry have a major role to play. The discovery of X-rays, of the electron, and of radioactivity, all in the closing years of the past century clearly revolutionized physics, and that study is still catching up with the implications of the processes involved. Cosmic rays, those high energy particles from beyond the earth, are still under investigation to determine their nature and origin.

The atom, once regarded as a fundamental unit of matter, is now shown to have twenty-one discrete parts, though many of these are of a highly evanescent nature. They have been demonstrated in the high energy machines, such as the cyclotron, the cosmotron, and the bevatron. It has however been cynically remarked that as

the number of particles we identify in the atom increases, our understanding of it decreases! The atom is mostly empty space, with the nucleus occupying about one 10-thousandth of the radius. The radius varies from about 0.5 to 3 angstrom units. (An angstrom is one ten millionth of a millimetre). An adult human being contains a number of atoms which is expressed by 7 followed by 27 ciphers!

The nucleus of the simplest atom, that of hydrogen, is called a proton. It has a positive electrical charge. In a cloud surrounding the nucleus is a similarly charged but negative particle, the electron. The electron is the lightest particle known, with a mass of 10^{-27} grams. As one progresses along the periodic table the number of protons in the nucleus increases. This number determines the building properties of the atom. A nuclear force, different from an electrical one, holds protons together so that atoms of different elements, with different atomic numbers and weights, may be built up. Isotopes are an important factor in the elements. As the number of protons increases, however, the nucleus becomes less stable. The electrical forces become dominant, and we call the element radioactive because the nucleus is no longer stable. These forces set an upper limit to the atoms occurring in nature, with 92 protons in the uranium atom the heaviest observed to occur naturally. But man's tinkering with the atom has resulted in the creation of elements up to atomic number 101. The last three elements are of very recent origin and of great rarity. They are named to commemorate famous names in physical science, Einsteinium 99, Fermium 100, and Mendelevium 101.

SOME PHILOSOPHICAL IMPLICATIONS OF PHYSICAL LAWS

The discovery of the laws of physics has produced a revolution in scientific thought itself, in the ideas of space and time, of cause and effect, and of determinism. The ideas of Newtonian mechanics were strictly deterministic, but a change has now crept in. The early Bohr model of the atom, based on stationary electron orbits, has been displaced by the wave mechanics of Schrödinger, Heisen-

berg, and Dirac. Einstein's theory of relativity has made an enormous contribution to twentieth-century thought.

The displacement of the Bohr atom model by wave mechanics has great advantages, but it shows that an indefiniteness is implicit in nature itself. The outcome of this reasoning is Heisenberg's Principle of Indeterminacy. This principle states that the exact speed and position of a particle of matter cannot be measured simultaneously. For strict determinism, therefore, very high probability was substituted. The basic laws of the world of nature are the laws of probability, and not the causal laws of Newton. The reason that determinacy had earlier appeared to be the truth is that in most cases we are dealing with large numbers of particles. When one deals with large numbers, the probability of a state becomes high, and it appears as though determinism were valid. The uncertainty principle comes into prominence when one deals with very low speeds, or very high speeds, or very small distances (in terms of atomic diameters).

The laws of statistical mechanics seem therefore to be the ultimate laws. Interpretation of these new ideas involves new ideas of logic. A three-valued logic is being developed, based on work by the Dutch mathematician Brouwer. This is an attempt to explain why an electron may possess contrary properties, sometimes being like a wave, sometimes like a particle. This is allied to the problem of Descartes, free will or determinism. In the macroscopic world these seem to exist together. In his *Principle of Complementarity* Bohr has tried to explain this. They form complementary functions, just as a particle can have both velocity and position, but they cannot be known together.

ATOMIC ENERGY

The break-down of atoms, with reactions which convert mass to energy, is one of the most important concepts in our world today. It would be hard to find a greater contrast in what a single process can mean to life on earth. By supplying power for the most destructive man-made force the world has ever known, the atomic

and hydrogen bombs, it can prove our total destruction if it is not kept leashed. On the other hand, atomic reactions provide the great store of energy which keep the sun and the other stars shining! The vast, never-ending energy of the sun, which has been flowing toward us at a relatively constant rate for hundreds of millions of years, is a prime necessity for life on the earth. So on the one hand we face the horrors which can be brought on mankind by martial unleashing of atomic energy. On the other hand we must acknowledge that all life on this planet of ours is dependent on the sun's atomic power. Truly the slogan "Atoms for Peace" must become one of the prime slogans of the twentieth century if mankind is to survive. The late Albert Einstein told Mrs. Franklin Roosevelt that "The fate of the human race is more than ever dependent on its moral strength today."

The energy of the sun comes from a chain of atomic reactions known as the proton-proton chain. This is a series of three reactions in which, briefly, hydrogen is converted to helium. Energy is given off as a positive electron (positron) and emitted radiation. The early alchemists had the right idea after all, when they were looking for transmutation of elements. Their inability to make such transmutations was due to the fact that their crucibles were not hot enough—they were lacking in energy. In the interior of the stars, where temperatures reach millions of degrees, and even tens of millions, the necessary energy for these reactions is provided.

To the sun and stars the cost of this radiation is tremendous. Four million tons a second of the sun's own matter is being annihilated to provide the vast flow of life-giving radiation which the sun pours out in all directions in space. (We must not have the idea that this radiation is intended primarily for our earth, either. Actually the earth intercepts less than one part in two billion of it. But a whole new field of science is opening up as various methods of harnessing solar energy are developed.) Even though it is being consumed at such a rate, the total mass of the sun is so great that its radiation will last for many thousands of millions of years yet.

Similar destruction of mass is going on for all stars in the universe, though in the case of the more luminous stars, those with

ten times the sun's luminosity or more, a different set of nuclear reactions known as the carbon nitrogen cycle takes place.

HOMOGENEITY OF MATTER IN THE UNIVERSE

It is interesting to think back to an incident which occurred in the French Academy of Sciences before the study of spectroscopy came into being. A savant, attempting to find a simile for an unlikely event, remarked, "That is as impossible as ever to discover the constitution of the stars." Not merely do we now know the constitution of the stars (in some respects, better than that of our own earth), but we can also surmise the constitution of the great clouds of unformed matter in space, and of the distant galaxies.

When the light from any of these objects is passed through a prism or a grating, it is broken up into its constituent parts. We can literally read the composition of the stars line by line, because each chemical element produces certain lines. From these observations a remarkable fact appears. The very same chemical elements which make up our own earth, its rocks, its waters, its air, are found throughout observable space. This homogeneity of matter is one of the most beautiful and orderly facts of the wonderful universe in which we live. The same atoms abound, and obey the same physical laws, throughout the entire visible universe, to a depth of 3,000 million light years in space. (A light year, the distance that light travels in one year, is six trillion miles.)

The element hydrogen, the simplest of the elements, is by far the commonest. It is one of the main components of the great cosmic clouds of gas. It is the fuel that keeps the stars shining. When a star has exhausted its supply of hydrogen, it is nearing the end of its life. Stars similar to our sun have about one per cent of their weight in carbon, nitrogen, oxygen, neon and nonmetals, one-quarter of one per cent in metals, ten per cent in helium, and all the rest in hydrogen.

THE SOLAR SYSTEM

Close around us in the universe is our solar system—the life-giving sun with nine planets (including the earth), comets, asteroids, and other debris circling it. Four hundred years ago the long-held belief that the earth was the centre of the solar system was cast aside by Copernicus and supplanted by the idea that the sun was the centre, and the earth was one of the planets revolving around it. The unique position that the sun occupies in the solar system (and its physical relation to the earth) is shown by the fact that the sun possesses 99.9 per cent of all the material in the solar system! Of the remaining 0.1 per cent, the giant planet Jupiter possesses more than half.

Several problems of the solar system concern us at present. Is there evidence for life on any of the other planets? Can man hope to reach by space travel any bodies beyond the earth, or is such talk only in the realm of science fiction? And what catastrophes from outside the earth, if any, might annihilate life here?

LIFE ON OTHER PLANETS

In general it is conceded that for any kind of life to exist on a body there must be some kind of air, the temperature must at some time rise above the freezing point of water, and must not consistently be above the boiling point of water.

With this definition in mind, let us take a look at places in the solar system where we might expect that some living thing might be found. Our nearest neighbour, our satellite the moon, is immediately ruled out by its lack of atmosphere. In addition, during the two-week long lunar day and the equally long lunar night, the temperature swings are very violent. They range from above the boiling point of water down to several hundred degrees fahrenheit below zero, and would put an enormous strain on any organism which tried to exist.

Working outward from the sun, we think of the planet Mercury, an unfortunate little body from the standpoint of life, for its periods

of rotation on its axis and revolution about the sun are the same. This means that, just as the moon turns the same side always toward the earth, so does Mercury turn the same side always toward the sun. The sunlit side of Mercury has a temperature above the melting point of lead, while the perpetually dark side is down near absolute zero. With no atmosphere at all, Mercury has no claim as a likely abode for life.

The problem is different with Venus, our sister planet, which is much more like the earth than any other body we know in the universe. Venus is much warmer than the earth because it has only two-thirds the earth's distance of 93 million miles from the sun. Its diameter is almost as big as the earth's. Unhappily our knowledge of Venus at present meets a sharp cut-off because ever-present clouds surround the planet. The clouds on earth frequently roll away, but those on Venus never do. What lies under those clouds—indeed, what the clouds themselves are made of—is a subject for intense speculation at present. It is also a problem whether we shall ever from earth be able to determine what is under the clouds. It has been suggested that Venus is a completely water-covered planet. It has also been noted that the intense heat might boil the oceans away. Whether conditions under the Venusian clouds are fit for life is at the moment unknown.

Beyond the earth, the planet Mars is one of the most interesting objects in the sky. Here is a planet of whose surface a real study can be made, especially at times of close approach, as in 1956. Mars is a planet with a small amount of atmosphere, certainly much less than the earth has. Breathing on Mars would not be too comfortable, but it would be possible. The temperature at the equator is a little chilly, but quite bearable. There seems to be a small amount of water present, as the polar caps, now thought to be of light snow, come and go with the seasons. The day on Mars is very similar to our day, only forty minutes longer. The year is nearly twice as long as ours, but seasonal swings of climate are similar as the inclination of the axis of Mars is almost the same as ours.

Therefore our present knowledge of Martian conditions does not rule out the possibility of life there. On the other hand, though attempts have been made to obtain positive proof of such, they have so far been unsuccessful. Efforts to photograph the spectrum of chlorophyll (the characteristic of plant life) from Mars have not yet succeeded. It is true that large areas of the planet change colour with the seasons, turning from brown to blue green. A low form of vegetable life, such as lichens or mosses, has been suggested as explanation for these changes. There are other logical causes for such colour changes however, such as the colour difference between moist and dry rocks, or variations in atmospheric transparency which certainly changes on Mars in ways not yet understood. The famous canals of Mars are not yet fully interpreted, but their explanations are given currently in terms of physical phenomena, such as wind-drift streaks of volcanic ash. Astronomers do not regard them as evidence of intelligent creative activity.

Beyond Mars we pass through the region of the asteroid belt, these "flying mountains" in space, where all physical conditions absolutely rule out life, and come to the giant planet Jupiter. At a distance of nearly 500 million miles from the sun, Jupiter and its moons are so perpetually cold as to make life impossible. Jupiter is thought to consist of a rocky core surrounded by a sheet of ice some tens of thousands of miles thick. Outside the ice sheet the planet's atmosphere consists largely of the noxious gases ammonia and methane. We cannot think of life under such conditions. Beyond Jupiter the outer planets Saturn, Uranus, Neptune and Pluto can only be described as colder and colder, and even less favourable for life.

Therefore in our solar system the two places beyond the earth where some form of living thing may exist are the planets Venus and Mars. Any other locations would appear to be so completely unfavourable that they can justly be described as impossible.

SPACE TRAVEL

The nearest bodies in the solar system take on added interest as the days of space travel come closer and closer. Few scientists could now be found who would say that a trip to the moon is impossible in the years to come. Once the earth satellite is launched in an orbit which may extend out 800 miles from the earth, a moon rocket is within our grasp. With proper rocket fuel man might go to the moon and back in a week. To get away from the earth's gravitational field it is necessary to reach a minimum speed of seven miles a second at the surface. This velocity of escape varies with the mass of a body. If you are travelling at this velocity you can get to the planets Mars or Venus in times which are shorter than those of many voyages of exploration in early days on our own earth. The times involved are only months, with something over a year for the return trip.

However, space travel beyond either of these bodies seems unfeasible, if not impossible, at present. There would seem to be no reason for sending a space ship toward Mercury, with its extreme conditions. The impossible surface conditions of bitter cold make the voyage to Jupiter and the other outer planets futile, though the time involved is not impossible. It is however unthinkable from the time factor alone that man could ever travel beyond the solar system to reach planets around other stars.

One thing is certain: if a landing is ever made on the moon, Mars, or Venus (with of course the necessary supplies brought along to sustain life) the voyageurs will not reach a spot as pleasant for life as our own earth. In its physical characteristics our planet earth provides the best abode for life that we know at present in the entire universe. The Creator has put us on a land of abundant air, of abundant water, of temperatures more moderate and less variable than on other bodies, a land where vegetation flourishes and sustains animal life. We should not have to make a space-ship expedition to bring home an appreciation of the glorious natural richness of our own earth as an abode for life. It is up to man to realize and appreciate his great heritage, and to eliminate in every

way in his power the man-made troubles which beset us on this earth. "Everyone to whom much is given, of him will much be required" (Lk. 12: 48, R.S.V.).

POSSIBILITY OF OUTSIDE DISASTER FOR THE EARTH

Once we have become aware of the fact that the earth is peculiarly fortunate for life, it is natural to wonder whether any force from beyond our earth may interfere with the pattern of life here. Of first concern is the steadiness of the sun's heat output. If the sun itself were extinguished, all life on the earth would be gone in a few weeks at the most. But we have already seen that the sun's radiation has been relatively steady for hundreds to thousands of millions of years, and from our knowledge of stellar energy we can predict that it will continue so into the future for tens of thousands of millions of years. We are indeed fortunate that our sun is not one of the numerous tribe of stars whose light varies. There are stars which double their radiation output in the matter of a few hours. However, such a variation in the sun's light would have rendered life on the earth impossible from the beginning. There is no evidence that our sun is the type of star likely to blow itself up in a nova outburst, as some stars do. On the contrary, our sun is a remarkably steady type of star which goes on radiating at a uniform rate over vast aeons of time.

Furthermore, although our sun is moving amongst the other stars with a velocity of 12 miles a second, there appears to be no danger that it will collide with anything in any finite period of time. We can see no force from outside our solar system which would interfere with life on earth.

Collisions within our solar system can take place. These could have serious consequences, but it appears impossible that any internal solar system collision could actually annihilate life on earth. A collision with a comet is an event frequently imagined. Actually a comet is an airy nothing, a giant body of very little mass astronomically speaking. In fact, a comet has so little material in it that no comet has ever been observed to pull another solar

system body off its course by a measurable amount. The earth has frequently passed through the tails of comets. The effect was usually a shower of meteors "or shooting stars," since the material in a comet's tail consists of specks of dust which can cause such a shower.

As an exceedingly rare event, the head of a comet could strike the earth. Then there would be destruction, because a comet's head consists of solid chunks of material. The effect would be comparable to the fall of a giant meteorite, such as carved out Barringer Crater near Winslow, Arizona, or Chubb Crater in Ungava. It is beyond question that the destruction associated with the formation of such a crater is enormous. There would be total devastation over an area of hundreds or thousands of square miles of the earth's surface. We are able to assess this partly from the fall of a swarm of meteorites in Siberia in 1908. The actual rocks may not be very large, a few feet up to several hundred feet in diameter. But the passage of such a mass through the earth's atmosphere with velocities of many miles a second causes a shock wave which would be like a fiery furnace blast for everything around it.

We do not yet know the frequency of fall of large meteorites. Apparently only once in some thousands of years over the earth as a whole would an object come down large enough to cause severe desolation. And this would be localized. The earth itself would keep rolling along, and life would remain on it.

Therefore we can say that the chances of man's destruction from extra-terrestrial forces are infinitely small compared with man-made factors which may hinder his continued existence.

THE MILKY WAY SYSTEM

Our sun is but one of a vast horde of stars which make up our Milky Way system. This is shaped something like a watch, and when we look into the beautiful clouds of the Milky Way "powder'd with stars" on a sparkling night, we are looking the long way of the watch. Something like 100,000 million stars form this system, along with about half their mass of unformed material. In this

system of our galaxy, distances are vast and dimensions huge. The star nearest our sun is just over four light years away. The diameter of our whole spiral-shaped galaxy is around 75,000 light years. Just as man once had to shake off the idea that the earth was the centre of the solar system, so we have had to discard any notion that our sun is at the centre of the Milky Way system. Measures show it to be some 25,000 light years from the distant centre which lies in the Sagittarius region of the sky. Behind the heavy Milky Way star clouds which hang above the southern horizon on summer nights lies the centre of our galaxy. From a great distance our galaxy would appear like a giant pinwheel with trailing spiral arms. And like a pinwheel we are turning around the centre. It takes approximately 200 million years for our sun and the nearby stars to go around once—a unit of time known as the cosmic year. The sun's speed is about 165 miles per second in this rotation of the galaxy. It is a little eerie to think that the sun has been around the distant centre at least fifteen times since the earth was formed.

Ours is not the only galaxy. There is no longer any doubt that our galaxy is one of the great spiral nebulae, or island universes. Indeed it was from a study of some of the others that we have learned about our own, reasoning by analogy. From inside, where we are, it is hard to detect the spiral structure, but techniques for the solution of this problem are now becoming more sophisticated.

On all sides, as far as our largest telescopes can reach, the distant galaxies are dotted around the sky in numbers as yet uncounted. No one can yet say how many there are, but the number certainly runs to the millions, maybe to the hundreds of millions, or even the thousands of millions! The only region in the sky where we cannot see them is along the central part of the Milky Way. There the heavy clouds of unformed matter, primordial gas and dust, in our own galaxy blot out our view to the universe outside. These are the clouds in which stars are still being born.

CREATION OF STARS

One of the most radical changes in astronomical thought of the past few years is the realization, from observational evidence, that stars are still coming into being—that the creation of the universe is still proceeding. For years astronomers had thought of the universe as something that began at a finite time (some thousands of millions of years ago), that the stars had all been formed together, and that some grew old more quickly than others.

Now it appears from some of the heavy patches of unformed matter in the sky, as for example in the central region of the great constellation of Orion, that stars are even now being created out of cosmic dust and gas. Several lines of evidence have contributed to this changed belief. One is the realization, from the energy outpouring of certain very hot blue stars, that they cannot have been in existence more than ten million years. This is but a second of time in the life history of our earth and of most of the observable universe. Obviously these stars must have been formed in relatively recent geologic time. Another recent piece of evidence is a set of photographs which Dr. George Herbig of the Lick Observatory showed to the International Astronomical Union in 1955. These pictures of a thick region of nebulosity showed stars which had not been there on photographs made some years earlier. The best interpretation is that these stars have just condensed out of the nebula. At the density of material in the Orion nebula, a cloud of gas would have to have a diameter of 10,000,000,000,000 miles to have as much mass as our sun! In time the cloud will shrink down to a few million miles.

The idea of present-day creation of stars gives us a different picture of our universe. It indicates a universe which is still evolving and developing.

THE MUSIC OF THE SPHERES

Even before astronomers have had the opportunity to assimilate the universe revealed to them by the big instruments of this century,

a whole new world has opened with the infant science of radio astronomy. From earliest times man has observed the universe only in the wave lengths of visible light, some hundred thousandths of a centimeter. But two decades ago the discovery was made that many of the heavenly bodies are sending out radiation in long wavelengths, waves measured in centimetres, or metres, even up to several hundred metres. It so happens that the earth's atmosphere which is opaque to many wavelengths has a window here which lets these through. And so with powerful new radio telescopes scientists are studying the heavens in an unexpected way. The age-old phrase "the music of the spheres" has taken on new meaning as the elaborate recording devices pick up sounds from the heavenly bodies.

In size, because they seek to collect radiation which has such a long wavelength, these radio telescopes have diameters in feet which are roughly equal to the dimensions of optical telescopes in inches! The largest of the paraboloid type, the 250-foot telescope at Jodrell Bank in England, will soon be helping to probe the mysteries of the universe. Other types of radio telescopes consist of long arrays of wires, hundreds of feet in length. Across farmers' fields strange patterns of wire are stretched, to gather this radiation and study it. Once more it is borne out that "There are more things in heaven and earth, Horatio, Than are dreamt of in our philosophy" (*Hamlet*, Act I, Sc. V).

This long wave radiation comes to us from various celestial sources. Our sun is one of the principal senders, and one of the nearest. Recent observations show that the planet Jupiter emits powerful bursts of radiation. Most sources, however, are far beyond our solar system, and some are beyond our galaxy.

One of the strongest sources is in the constellation of Taurus, a famous shell of gas known as the Crab Nebula. This is a star which was seen to blow up in 1054 A.D., when it was recorded by Chinese astronomers as a "guest star" of great brilliance. This was the type of phenomenon known as a supernova, which is the greatest catastrophe in the universe (defining catastrophe as destruction of matter). Such a stellar explosion pours forth in one day as much

energy as our sun does in over a million years. And now, 900 years after the explosion, we are still receiving strong radio radiation from it.

Another strong source is in the constellation of Cygnus. Careful observation has shown that this is two galaxies in actual collision. This source is at a great distance of millions of light years from us. That we can observe it at all means that the outpouring of radio energy is enormous. It amounts to an incredible number of kilowatts, 1 followed by 33 ciphers!

Apart from these discrete sources, radiation comes from larger areas scattered around the sky. This is from vast clouds of interstellar neutral hydrogen atoms. They emit in a characteristic wavelength of 21 centimetres. Many of the radio telescopes being built around the world now are being tuned especially to this wavelength. This 21-centimetre radiation has been called "the song of hydrogen." Since these vast clouds of hydrogen are the birthplaces of stars still being formed, we may also call it "the song of creation." Nowadays "the heavens declare the glory of God" (Psalms 19: 1) in audible tones, to bear out the words of the psalmist of old.

GALAXIES AND THE EXPANDING UNIVERSE

We have seen that on all sides of us, as far as our telescopes can reach, the galaxies stretch off into space. Each of the last four centuries has seen bigger and better telescopes to probe the universe to greater and greater depth. The 200-inch giant on Mount Palomar can photograph to a depth of 3,000,000,000 light years. There is no reason why a bigger telescope cannot be built to reach farther into space. And it is just as likely that the sensitivity of the photographic plate can be increased, or that new electronic processes may capture light from more distant objects. All these may mean in a very few years an increase in the depth of space we can study.

What then will set the limit of the observable universe for us? Strangely enough at present it seems that the limit will not be set by the effectiveness of the instruments man builds. On the con-

trary it will probably be set by the velocity of light itself, correlated with the observed shift in light from the distant galaxies.

One of the most startling astronomical discoveries of this century has been that the other galaxies are receding from us—from the sun and earth, and from our own galaxy. And the speed of recession of a galaxy is proportional to its distance, approximately 30 miles a second for every million light years of its distance from us.

This result is obtained by measuring the shift to the red in wavelengths of lines of the familiar element calcium when the light of a galaxy is split up by passing through a spectroscope. (This is the physical principle known as Doppler effect). It was first discovered more than a quarter century ago that the galaxies were running away from us with speeds of hundreds of miles a second. As more powerful instrumental technique was developed, more distant galaxies could be measured. These showed greater speeds, even of tens of thousands of miles a second, and up to as much as one quarter the velocity of light. Even now the problem is still being pursued observationally to the limit of the 200-inch telescope, and new results may be made known at any time. For years there has been a problem whether these measured shifts are true velocities, or whether some unknown physical principle causes the shift. Most scientific thought now appears to accept them as true velocities. This conclusion has been given added strength by an important development at the end of 1955. Astronomers at Naval Research Laboratory in Washington, D.C., announced that the same displacement to the red as previously measured for visible radiation is also measurable at radio wavelengths for the Cygnus source.

Light travels with a finite velocity of 186,270 miles a second. When you reach far enough into space to the distance where objects are receding with the velocity of light, then those objects are forever invisible. The limits of the visible universe have been set for us. From our present observations this limit would appear to be near 6,000 to 7,000 million light years. (Continuing observations with big telescopes may somewhat alter this value). Probably this

boundary is not within the attainment of the 200-inch telescope in the immediate future. Almost certainly it will be within the range of human achievement before this century draws to a close.

THE ORIGIN OF THE UNIVERSE

It may at first seem to be over-straining to speculate on the origin of the entire universe when we are forced to admit that as yet we have no clear cut picture of the origin of lesser bodies like our earth, our moon, and the solar system in general. Nevertheless the observations of the distribution and forms of matter in space, and especially of the velocities of the galaxies, have literally forced on the consciousness of man the question of the beginning of the universe and the direction in which it is heading.

In general there are two broad kinds of theories for the origin of the universe. One is the explosion theory, of which Gamow is the principal proponent. The other is the steady state theory, for which Hoyle, Bondi, and Gold have worked out various details. Each theory seeks to explain both the observed velocities of the galaxies with respect to the time factor, and the distribution of matter in the universe.

On the explosion theory the universe is pictured in the beginning as an extraordinarily dense conglomeration of neutrons and protons. This giant globule had a temperature of 15 billion degrees, and a density of 10,000 grams per cubic centimetre. Then at zero hour the elements were made. In a mere 20 minutes in one giant cataclysm all the elements were formed. For some thirty million years after that, things happened slowly. Big spherical balls of gas were formed. In time, if gravitational attraction is high, each ball would form a galaxy with a mass of 10^{40} grams. The half life of the thorium atom sets the age of atoms as about 6,000,000,000 years. On this theory we should find nothing older in time than this, and it is true we do not. The antagonists of the theory point out that there are no observable remains today of the superdense globule. If the theory is correct we might expect to find some superdense galaxies which were formed early in the days of the

universe. According to the explosion theory, the galaxies having the highest velocities will at any time have reached the greatest distances from the earth.

According to the steady state theory the expansion of the universe indicated by the recessional velocities of galaxies is explained by the continuous creation of matter. Just as there are electro-magnetic fields and gravitational fields for matter, it is postulated that there is also a creation field which causes matter to originate. Matter originates in response to the influence of other matter. This forces expansion and determines its rate, for the average density of matter in space is kept constant.

Hoyle's latest computation indicates an average density of matter of about one hydrogen atom in the volume of a good-sized suitcase. This may be explained by a continuous creation of matter at the rate of one hydrogen atom every second in a cube with a 160 kilometre side. Within the radius of the visible universe (roughly 6,500,000,000 light years), matter originates at a rate of 10^{32} tons per second.

In our survey of the universe then, we finally come up against factors of great distance and great time which it may well be beyond human power to penetrate. A veil may be thrown across further knowledge from observational science. If so, it will remain for philosophy and theology to give us an understanding and interpretation of the whole.

II

Man in the Universe

ARCHIBALD G. HUNTSMAN

THE LIFE of man as we know it seems insignificant in amount amid the enormous activity or life that, in varied character and intensity, pervades space and creates time. Our whole solar system is insignificant amid galaxies and metagalaxies, and in that system our earth forms but a small part. In the earth, man forms a still smaller part and plays but a small role, large as it looms to him. Although he now travels up in the air, and down in the water as well as over the surface of the water, he is still properly limited for living to the surface of the land. The difficulties he experiences in living on any part of this surface are evident from the fact that the greater part of Canada is without human habitation. But, apart from the very complex social problems that he creates for himself, particularly in increasing his numbers in a limited environment, man is marvelously able to lead a very full life in adjusting to the great diversity in a world composed of related organisms from extremely minute atoms to large plants and animals, a world to which he belongs and with which he has most intimate relations both in his origin and in his living from moment to moment.

Knowing has such great limitations and we as yet know so little of what we might that I am rash in attempting to relate man to the universe in which he lives.

CREATION OF MAN

Man is not as peculiar as he is wont to think. The kind of activity or life¹ that he shows is the more or less highly organized activity to be seen in all plants and animals (so-called "living beings"). But, the substance of plants and animals consists of the same atoms as are to be found in air, water and land. Even the atoms are highly organized, and they organize themselves into varied kinds of larger units, the molecules. Plants and animals are like the molecules of water, salt, copper, gold and other chemical substances in being organized units, in which atoms with great energy are peculiarly combined. Each kind of molecule has a distinctive character which depends upon the kinds and arrangement of its constituent atoms. Similarly, each kind of atom has a distinctive character depending upon the kinds and arrangement of its parts (electrons, protons, etc.). In the broad sense, all matter is living as shown by varied activity, for which energy is responsible. The matter in the suns and other bodies throughout the universe represents a tremendous amount of organized activity or life.

How has the energy of the universe created man, that is, brought him into being? By manipulating matter, man creates machines which work through a combination of stability and activity. In constructing a machine he takes advantage of the great stability of atoms and of the rigidity they give to a mass when they are closely fitted together. He gives to very hard iron a sharp cutting edge and uses it in a mill activated by the energy of the moving atoms in wind or in falling water to saw logs into lumber. In other words, he arranges atoms so that they will work for him, according to their natures. He merely sets the stage. In chemistry, man sets the stage for the atoms to act in combining, separating and recombining to form molecules of different substances, even new substances.

¹No attempt is made to distinguish between "life," "activity" and "change." The meaning is the broad one to emphasize its universal character. In common usage, different words with the same meaning and the same word with different meanings prevent clear expression.

Similarly, the universe created man by setting the stage for the atoms to act. It was a very long process because of the extreme size and complexity of the new combinations that the atoms were to form. The process required not only a mass like the earth with the varied kinds of atoms in suitable proportions, but also a suitable temperature, neither too cold nor too hot for the necessary combinations, separations and recombinations of the atoms. The earth has had the suitable temperature through being at the proper distance from the sun to remain suitably warm throughout the very long period of time that was necessary, and also through the sun having a very steady output of energy as light and heat. As we know them, plants depend for their growth not only upon the availability of the necessary atoms and the suitability of the temperature, but also upon light from the sun to provide energy for separating carbon and hydrogen atoms from firm combination with oxygen atoms so that they may combine to form the carbohydrates that will liberate energy when their atoms reunite with oxygen atoms. Animals, including man, depend upon carbohydrates and other substances formed by plants for the energy of their activity or living. Both plants and animals vary greatly in size from kinds that can be seen only with a microscope to kinds much larger than man. But, at their smallest they are very much larger than the comparatively simple molecules of rock, water and air, with which they are in series. The intermediate stages between such molecules and the simplest plants and animals are not known, perhaps through conditions not now being suitable for their formation, as is clearly true for many kinds of plants and animals of which only fossil remains can now be found preserved in particular strata laid down on the solid earth in particular stages of the earth's history. These strata reveal the succession of more and more complex plants and animals, with man appearing only in those laid down quite recently.

Plants and animals not only grow by addition of atoms or molecules which extend the existing pattern, but also divide with increase in the number of units or individuals. In this way the complex pattern of atoms in a certain plant or animal is reproduced

indefinitely with no need for the more or less special conditions that determined the development of that particular pattern among the myriad of possible patterns that the atoms might take. But, there seems to be a limit in the size and in the complexity of the pattern that can be properly divided. Even the smallest and simplest animals tend to return to a simple state for division. The large and complex ones are reproduced from very small and simple parts, the germ cells.

An adult man consists of an enormous number of highly organized unitary parts or cells, which have resulted from repeated division of the single minute cell from which he developed. Each cubic inch of his blood contains about eighty-two billions of the minute red blood cells or erythrocytes for carrying oxygen, which are being constantly destroyed and replaced. The brain alone contains, it has been calculated, about twelve billions of the large nerve cells or neurones which are responsible for his conscious activity. Yet the man develops in about twenty years from the single cell of human character that is not only simpler than the man, but simpler than a fish, or even than common minute Protozoa or primitive one-celled animals, so far as present knowledge goes. That initial cell is too simple to look after itself as the Protozoan does. It has the human pattern, but before it can be a really separate and independent individual it must grow and multiply with great differentiation of the resulting cells according to the situations they occupy into very many kinds from erythrocytes to neurones. The initial cell needs to be simple to be able to produce such very different kinds of cells. Although comparatively simple, the initial pattern of atoms for the individual is complex enough to be not only peculiarly human, but also peculiar for the individual, and this depends upon its particular origin. It arises from the union of a sperm from the father with an egg from the mother, and both sperms and eggs differ somewhat in pattern so that the pattern for the individual depends upon which sperm unites with which egg.

Significant as is the pattern in the minute cell from which the individual starts, development into the immensely larger and more complex adult is dependent upon the environment for all the

necessary atoms and conditions for their action. Each man is created by his environment, which means by the earth in relation with the sun. Going back in time, he himself recedes into insignificance as an initial minute pattern. Going back through the ages, that pattern which he inherited was determined by the environment. Although created rather than selfmade, he takes as he develops an increasingly larger share in creation.

MAN'S UTTER DEPENDENCE

Man can live only in very restricted situations, as is true also for all animals and plants. These creatures are found only inside a very thin layer at the surface of the solid earth. They are practically confined to places where land, water and air come together either directly or indirectly, since they require atoms or molecules from all three. Man can live only on the land, although he requires water and air more than material from the land.

His dependence upon air is evident from the rapidity with which he dies when he is unable to breathe. The oxygen that forms about twenty per cent of the air needs to be available in his lungs, whence it is carried to the various tissues of the body in the bloodstream and in combination with haemoglobin, a characteristic constituent that gives the red blood cells their colour. In the tissues, energy needed for his living is released by combination of the oxygen with carbon and hydrogen from sugars and fats, with production of carbon dioxide and water. The carbon dioxide at least needs to be removed and is carried in the reverse direction to the oxygen, that is, in the bloodstream from the tissues to the lungs, and thence out in the expired air. Life activities are dependent upon such steady interchange of atoms in gaseous form between the body tissues and the air.

Man's tissues consist largely of water, without which their characteristic activities are impossible. Water must be obtained from some source. Water that is lost from the tissues by evaporation into the air in the lungs or otherwise must be replaced. Water to drink is as vital a need as air to breathe. The importance of

water in life activities depends upon its permitting greatly varying chemical processes in rearrangements of atoms (such as those that produce carbon dioxide and water) to take place in the tissues when the substances concerned, whether ordinarily solid, liquid or gas, are dissolved or dispersed in it. Very many substances dissolve in water, where many of them split up into simpler and more active parts, the ions. The chemical activity of the ions as dispersed in water has indeed been considered to characterize the living of plants and animals.

Similarly man needs solids, which is shown by his regular consumption of food. Fat in his tissues is the most evident form in which food is stored for future use by the tissues. But, food consists largely of substances formed by other animals and by plants. That he requires substances from the land is shown by his bones, which are hard by virtue of their content of lime or calcium and phosphorus. Solids which dissolve in water, such as common salt (sodium chloride) are needed in living activities, usually in small amounts. They leave the body in the liquids that are produced and they have to be replaced. There are rather many elements from the land, shortage of which prevents proper living. Notable among these are iron, which is one of the constituents of haemoglobin, and iodine, lack of which prevents full growth of the individual. As a whole, man is solid, but he consists chiefly of water and otherwise mainly of very complex compounds of atoms that are more or less peculiar to plants and animals rather than to the earth, although formed from simpler substances that are in air, water and land. Man forms more or less peculiar substances of his own, but, like other animals, he must depend for simple food substances either directly or indirectly upon plants, which alone can make these from still simpler substances in air, water and land, but only by getting energy from the sun's rays when exposed to light.

These interchanges between man and his surroundings form only part of his activities, but as constituting his basal metabolism they reveal his dependence, not only upon air, water and land, but also upon animals and plants and through the plants upon the sun. He is utterly dependent upon his environment.

BIRTH, DEATH AND IMMORTALITY

Man's exceedingly great complexity makes the relations of the individual to the past and to the future somewhat difficult to comprehend. As we have seen, he is utterly dependent upon his environment from moment to moment. The rather steady interchange of matter and energy between him and his environment prevents his being really discrete as an entity. Since each man merges into his environment in his daily living, he may be expected to merge into his environment in his birth or beginning and in his death or ending. His distinctness is more apparent than real.

Birth and death are correlative. What comes into being may be expected to pass out of being. Life is activity or change, and change is replacement of what has been by what will be. Life involves both birth and death. Unless the old goes the new cannot come.

Man's very activity means that his pattern or combination of atoms can be broken down rather easily by outer forces. He is far from having the resistance and durability of diamond or of gold. But, they lack his activity. Since he can be readily injured or destroyed, it is important for continuance of his activity that he be replaced. This is shown not only in the succession of individuals, but also in the details of each individual. His skin, which is most exposed to injury, is constantly being replaced by multiplication of the innermost cells of the epidermis. If a portion of the skin be removed, an automatic process of repair is initiated, which replaces the lost portion. When this process is completed, it stops automatically by self regulation. It is very different with the nervous system, which is in the interior of the body and largely protected by being inside the hard bone of the cranium. The nerve cells or neurones of this system are little exposed to injury, and have not the same need of being replaced as have the cells of the skin. For continuity in their activity as in memory, it is important that they continue rather than become replaced. And they do continue. Without any arrangement for their replacement, the activity of any that happen to be destroyed ceases and the part of the mind that

they represent goes. Yet they can repair some injury. They have processes, sometimes very long ones, which connect them with each other and with other cells for transmission of impulses or stimuli in integration of the self. These processes form the fibres in nerves. If a nerve is cut through, the part of any fibre that has thus been separated from its neurone dies, and the cut end of the remainder grows out to replace the dead part. The neurones do not reproduce themselves but they do repair injury. Also, some that remain may take over the work of any destroyed.

Immortality seems to mean a negation of birth and death, that is, a negation of life. It must refer to something other than the pattern of atoms that breaks down at death. It must also refer to something other than the parts of the mind that go when parts of the brain are destroyed. It thus becomes a matter of definition as to what is immortal. That which is back of all change or life is energy or will, which is timeless, being neither created nor destroyed, having neither birth nor death, and hence immortal. The atoms are very stable, most of those in the earth continuing indefinitely. They are thus practically immortal. The human pattern in combination of atoms has potential immortality through the generations of men that succeed one another. The particular pattern of the individual in combination of atoms may occur again, which would mean his rebirth to that extent. In addition to all these partial continuations of the individual, there is the unanswerable question of the existence of the past apart from time. Finally, there is the substantial fact that in ways seemingly beyond investigation there is a continuum, a oneness of things both in space and in time, and of this we form parts.

KNOWING, REMEMBERING AND BELIEVING

Knowing, that is, consciousness, comes and goes. It goes at night when falling asleep, and it comes in the morning on waking. It thus tends to be associated with light. The minute one-celled *Amoeba*, which is so primitive as to show no evident sense organs or muscles, stops being active when light is dim, and resumes activity

when light is bright. That activity is a streaming movement of its substance or protoplasm, which permits it to flow around a particle of food and thus ingest and digest it. Under the stimulus of light there is consciousness or awareness, as inferred from such basic activity for continued living. A young salmon is similarly inactive at night, but steadily active by day in swimming through the water and in seizing particles of food. As worked out in a salamander, which is between fish and man, this activity develops through the growth of central neurones or nerve cells to establish connections, not only with each other, but also with superficial sense organs through which stimuli reach them from the environment, and with muscles which move the animal through the environment. With such development, there can be conscious activity, with the muscle contractions co-ordinated so that the animal moves toward its food and takes the food into its mouth. Animals differ from plants in having such conscious activity.

As something that comes and goes, not only as a whole between conscious and unconscious states, but also in momentary detail, knowing is process or change. In variety and complexity our knowing largely defies analysis. Subjectively, it is an activity of the self that arises mainly and most strongly as sensation, such as sight. Objectively, it is represented by the conception of interchange of energy in electrochemical reactions in the brain, where most of the neurones are concentrated, the energy for them coming from the oxidation of food materials, and the interchange being initiated by stimuli from without through sense organs. If the supply of oxygen to the brain through the blood for such oxidation fails, as when dilation of abdominal blood vessels takes most of the blood leaving the heart, knowing or consciousness goes, the individual faints.

In knowing and thinking, we are confined to the kind of being that is consciousness. We cannot know or be conscious of the being that is memory, but we are conscious of remembering. We can know only knowing. To judge by the varied and conflicting results, there has been no success in thinking out the nature of being (ontology) or even the nature of knowing (epistemology). It is easy to become lost either in the variety and complexity of con-

sciousness, or in the verbiage that results from skilful manipulation of words that are merely symbols of doubtful significance. But, the complexity of thinking about knowing is quite confusing. All our thinking and speaking form part of our knowing and yet knowing is transitory. It comes and goes. There was past knowing, there is present knowing and there will be future knowing. Remembering past knowing is part of present knowing. Believing in future knowing is also part of present knowing. Strictly speaking, we know only the present, but remember the past and believe in the future. Yet, we are constantly bringing past and future together in the present, and thus they are known. The valued knowledge that guides our actions and that is dignified as being science well illustrates the wedding of past and future in present knowing. It is knowing the truth. To say: "I know that the sun will rise tomorrow" means that I remember (know the memory of) an invariable alternation of setting and rising of the sun every 24 hours, from which I firmly believe (know belief) that the sun will rise tomorrow. Verification of this knowledge or belief comes with our knowing daylight tomorrow.

If science is learning from the past to predict the future, it can be considered the main task of complex consciousness or knowing, as determining what we do. Our behaviour is thus conditioned by past experience. The extent of such conditioned behaviour increases in each person, starting at birth, when he is first exposed to strong stimuli that awaken consciousness. In the series from the simplest animals to man, the nervous system and the consciousness it represents increase in complexity. It is difficult to determine where conditioned behaviour or learning from experience first appears in this series. But, through memory and belief the animal may successfully adjust its behaviour to what faces it in a very complex environment. Man has been outstandingly successful in this.

Knowing is being awake or sensitive to stimuli, as through sight. The strong stimuli are usually through sense organs and afferent nerves to the brain. Science, which reveals only patterns, provides the conception of the pattern or structure of the brain as

representing the "I" that endures and that sees, hears, feels, smells, etc. To represent the knowing (seeing, hearing, etc.), which comes and goes, it provides the functioning of the brain, that is, electro-chemical changes in the neurones that form the main part of the brain. Full consciousness will occur when the nervous paths are fully open for stimuli from without to bring about these changes in the brain. Memory must be represented by records in the brain's structure of some of these changes, so that under certain conditions they will be reproduced. Belief must be represented in its simplest form by the tendency of a particular pattern of successive changes, after having been repeatedly evoked by outside stimuli, to recur when once started. Broadly speaking, conditioned behaviour should include all behaviour as modified by experience, that is, in which experience has affected the openness of the paths along which stimuli may travel in the nervous system that connects sense organs with muscles that bring about action.

The enormous variety and complexity in our knowing or consciousness is represented scientifically by the vaguely known functioning of an excessively complex brain, the chief part of a nervous system by which our behaviour is adjusted to our environment.

WILL AND FREEDOM

Man's conscious actions have his will as a background. It is the relation of his self to what he does, to the future he makes. It is manifested throughout all the complexities of his thinking and acting. Apart from its manifestations, it does not seem possible to describe it otherwise than as what is back of, or responsible for, what the self does. With this definition, it corresponds with energy, which the physicists postulate as being responsible for all changes, but do not describe otherwise. Both are intangible, but most potent. Energy or will² is to be recognized and measured

²It is to be noted that "will" and "energy" are used interchangeably with the same definition, irrespective of the desirability of "one entity—one name" that philosophers rightly stress. No matter what the situation, "will" represents the subjective aspect and "energy" the objective aspect of what is back of, or responsible for change.

only by its effects. It is the prime cause of all events. Will animates the universe, whose pattern is revealed by science.

Man's ability to predict the future successfully, although only very limited, has led him not only to speculate, but in some cases to believe that all the future is predetermined by necessity or fate, which has seemed to leave no place for his will, if free. It is indeed curious that, insofar as his will *is* free to act and thus determine what happens, he should ever think the action is not his will, but that of "fate," because someone might have predicted it. Man's will or energy is part of the whole and has its share in determining the future. It is a determiner of events. There is no necessity or fate apart from the will or energy of the universe.

Whether particular energy or will is free to act depends upon whether or not it is opposed. Forces that are equal and opposite reverse each other or pass into heat, the energy taking another form, that is, manifesting itself otherwise. Close association of wills restricts their freedom. Freedom in slavery is shown in revolution of electrons around the nucleus of an atom, and in the revolution of the planets around our sun. The will or energy shown by such movement is unopposed, continuing indefinitely, and is, therefore, free. But, it is that of a satellite tied to the power about which it revolves, and free neither to leave nor to approach that power, having to keep its distance. Such unopposed action of limited will gives in part the stabilities of the atoms and of our solar system. Man's being is firmly based on these stabilities. Our living would be impossible without them.

Dissociation of wills permits fuller freedom. When an atom breaks down, part of its energy is set free as a ray to move at immense speed in some direction. If it meets nothing in that direction, it is endlessly free, but its direction shows its continuing connection with its origin. Collision will end its freedom. Rays of light consist of quanta of energy travelling at the rate of 186,000 miles per second, each of which may be called a will. The light from the sun that ends on striking the earth brings energy both to maintain suitable temperature for plants and animals and also to activate them. In double fashion, our activity or living depends upon

energy or will from the sun, which is stopped by the earth from acting freely through space. We need it to keep sufficiently warm, and we need it as supplied in food for whatever we do. We exist by virtue of the extinction of the light, the stoppage of that will from acting freely.

While man depends upon the stability of the "freedom in slavery" of the energy in the atom and upon the activity of the "fuller freedom" of energy in light, he himself is a supreme example, not of freedom, but of complex co-operation or integration of wills. A complex of co-operative wills constitutes an organism. An atom, as an elementary unit of matter, is a very stable and minute organism, which in accordance with its kind varies in weight with the amount of energy, that is, with the number of wills that co-operate in its organization. Man's living consists in continual rearrangement of his constituent atoms as organized into molecules, that is, it is electrochemical. The atoms combine, separate and recombine in most varied fashion, depending upon their characters. In the act of combining, energy is usually taken in or given out to a variable degree, that is, the reaction is either endothermic or exothermic. In other words, it may require energy to bring them together or to separate them. When two or more atoms are closely combined into a molecule, they move as one. Molecules move more or less independently of each other, and the higher the temperature the more vigorously they move. Their relations vary with the vigour of their movements, as when water molecules separate to form steam at high temperatures, become precisely related to each other in crystals of ice at low temperatures, but hold together with no particular, but varying arrangement as liquid water at intermediate temperatures. Their freedom from each other varies with the vigour of their movements.

The molecules of man are organized into cells, of which he has many billions. In each, the continuing pattern forms a meshwork, in the interstices of which there is water with many substances in solution. These substances are in constant movement, not only in the cell, but also between the cell and the blood of some neighbouring blood vessel. The vast complexity of this situation can perhaps

be best appreciated from what is now known about vitamin B_{12} , a substance that is particularly in the liver. The eating of liver was found in 1926 to permit persons suffering from pernicious anaemia to maintain their supply of red blood cells that are so necessary for consciousness and life. A search was made for the substance responsible for this, but it was isolated only by 1948 as a deep red crystalline solid. But, only by 1955 was its chemical structure determined, and the difficulty of doing this was owing to its molecule consisting of so many (183) atoms precisely arranged. Of these atoms, 63 are carbon, 90 hydrogen, 14 oxygen, 14 nitrogen, 1 phosphorus, and 1 cobalt. The peculiarity of the substance is shown by the fact that no organic compound containing cobalt has yet been found in nature except the members of this B_{12} group. By chemical replacement, this substance was found to have the ordinarily poisonous cyanide group attached to the cobalt atom, so that as an amin it has been officially named cyanocobalamin. Further details of its complex composition were discovered by acid hydrolysis, which revealed an amino-propanol, a benziminazole ring system, and from four to six primary amide groupings. By crystallographic examination of degradation products, a novel macrocyclic ring system around the cobalt atom was worked out. By a combination of X-ray analysis and chemical evidence, the relative positions of all the atoms except hydrogen were deduced, and more work may give a better result. The significance of this substance for making red blood cells is indicated by its relation in structure to haem, an essential part of the haemoglobin that enables the blood to transport oxygen for our living.

Man's cells are organized into tissues, the tissues into organs, the organs into systems, and the systems into the whole man. There is co-operation throughout, each part exercising its will in contributing its share to the whole as required. Disastrous failure in co-operation of cells is shown by cancer. Cells that retain the ability to grow and multiply when required, such as those that repair a wound in the skin, may become independent to grow and multiply freely at the expense of other cells. The only recourse for saving the man's life may be to destroy them utterly, as by a cobalt

bomb, which owes its efficacy to radio-active atoms of the element that makes vitamin B₁₂ so peculiar. Man could not exist without his inconceivably complex organization of co-operative wills.

What freedom may the integrated will of the whole man have? It is obvious that he can move only at the risk of collision with other beings. To move freely he requires knowledge of where he can move freely, but this is required only when he wills to move. Whence comes that will? Its origin may be either from within or from without, and within always means remotely from without. The will can arise inside only as a remote result of the taking of food from which the energy or will comes as on oxidation of carbohydrates. The taking of food depends upon will to move as evoked by sight of food, and the food when taken provides will for further taking. It seems important to realize that our wills come from and are evoked by our environment, and that knowledge may permit us to fit them into the wills of our environment. In our egoism, we boast of conquering our environment, but, since, man has comparatively little energy, a little study shows that his will has been achieved by fitting into the wills of his environment. In direct opposition, he soon meets his match and fails. To deify freedom as the Goddess of Liberty and ignorance as the Goddess of chance is an overt failure in conscious living. Freedom is not a God-given right and it is to be won only through knowledge. Though much admired, the person should be pitied who in his self-sufficiency proclaims: "I am the master of my fate." His failure to know and to fit into his environment, that is, to be free, is well pictured: "Under the bludgeonings of chance, my head is bloody but unbowed." Man has accomplished very much by working with his environment.

THE HUMAN GOAL

Back of the activity that characterizes living is will. Without will nothing happens. Commonly will means fixed intention or purpose, something that is much more complex than the will that automatically and immediately results in change or action. It means an idea that, under suitable conditions, will result in specific

activity, perhaps over a very considerable period of time. When the activity is directed towards a particular final outcome, the latter becomes the goal to be achieved. A crop of wheat or corn for food may be the goal of farming activity. To the Mayas of Central America, corn or maize has been the goal of life for thousands of years. "It is still spoken of with reverence and addressed ritualistically as 'Your Grace.' It is the gods' supreme gift to man, to be treated with full respect and not a little humility."³

Mankind has had very many goals as spurs to more intense activity or living. When getting of food or mere living does not preempt all his energy, man may feel the need for other goals. What these will be must depend upon his will or there will be no activity. Can there be an overall goal for mankind which will be generally wanted? What do men value most? *Will gives value to activity.*

Western civilization has not been content with mere cyclical activity, in harmony with the alternation of day and night, or with the recurrent phases of the moon, or with the yearly repetition of seasons that gives man his food. It has taken up with the idea of progress that is now affecting all mankind. The clear path for progress is through knowledge that permits man to direct the energy or will around him to his own ends, to develop natural resources for his own use. This gives him leisure to feel the need for ever new goals, until or unless the resulting increase in his numbers again restricts his leisure time.

Some men have taken leisure to fit themselves for the highest life they could visualize, a future life free from all the evils of the present. Others have stressed the importance of preparing for the future by efforts to make the present life the best possible. There is extremely great variety in the ideals advocated for betterment of life.

In harmony with his nature, man tries by self regulation or homeostasis to maintain a precarious balance between two opposite ideals, stability and activity. In public policy, the conservatives or

³J. Eric Thompson: *The Rise and Fall of Maya Civilization* 1956, p. 238.

party of the Right represent more stability, and the liberals or party of the Left represent more activity. Stability restricts activity. Activity threatens stability. Also, in harmony with his nature, man tries to combine opposed ideals, unity and multiplicity, uniformity and diversity. How can many be made into one? How can what are different be made equal? Multiplicity has little advantage without diversity, and this tends to rule out the uniformity that may rather easily bring about unity. A combination of great diversity (many diverse parts) with perfect unity (an harmonious whole) is the goal that is so difficult to achieve.

In his structure, each man is a marvellous combination of diversity and unity. That he may go much farther in this is quite apparent, but it is not at all clear how the basic human pattern of atoms can be improved in this respect. In his conscious living, each man presents most varied and great possibilities of development. He has the continuing educational problem of combining great diversity with unity. In social organization, mankind has vast opportunities. The diversity of mankind is a patent fact. The problem is to form an harmonious whole with the fullest development of the individuals, who have different natures and are exposed to different conditions. The problem may be expected to change from generation to generation, but the human goal must surely be fuller human life in combining diversity with unity.

UNIVERSAL VALUES

Can we be expected to do anything else than condemn as inhuman any values that man does not have, even the chastisements that later prove to be for our good? We cannot very well be judges of what is best for the earth, for our solar system, or for the universe. Need we be concerned about such matters seeing that we are unable to play any very significant role in what they become? We are able to exercise some control over our more immediate environment. In so doing, we think first of what seems best for ourselves, and then of animals and plants whose life and activities we can best understand. Our system of valuation can be expected to apply to them.

Man's values inevitably reflect his situation and his limitations. But, as part and parcel of the universe, and as consisting of the same stuff, he will have values that are general throughout the universe. What may these be? To what activities does will or energy in general give value?

Perhaps foremost in man's thought on values is the idea of an immortal spirit, that life should not end, that there should be an unalterable, timeless basis for life, that is, for activity. Have we assurance of such a basis? Science affirms the law of the conservation of energy, although science cannot state what energy is, merely inferring it from its effects. It is back of all change. When one kind of change is converted into another kind, accurate measurement shows a constant numerical relation between them, as when movement is measured when gravity is converted into heat by friction. The energy required to raise 777 pounds one foot above the earth's surface in the latitude of 45° will raise the temperature of one pound of water one degree Fahrenheit. From such results, it is concluded that the amount of energy remains constant, that energy is neither created nor destroyed, but is timeless. The energy that is responsible for all the varied activities or life in the universe is, therefore, unalterable or timeless, and we cannot specify its nature. When by will we mean that in ourselves which is behind our actions, we are referring to energy, to what is timeless. When by spirit we mean what is behind activity or life, we are again referring to energy, to what is timeless. Life or activity will never cease because of the value that energy, will or spirit gives it.

The activity for which will or energy is responsible and to which it gives value builds up unitary systems or organisms, starting with the smallest and most stable, the atoms. They combine great unity with great stability in the form of parts powerfully held together in a nucleus, about which revolve electrons at different and precise distances. Thus, the simplest atom, hydrogen, has only one electron in one ring revolving around its rather simple nucleus, while uranium, now so important as a source of atomic energy, has ninety-two electrons in seven different rings around its very complex nucleus. The stability of the atoms represents immense energy, but

some kinds are of precarious structure, a constant proportion of them, which varies with the kind, breaking down in any given time regardless of temperature, into more stable units. This was first observed in radium, which on giving out energy in rays becomes the stable substance, lead. Now, we have radioactive isotopes of various elements, as produced in atomic piles. The atoms combine into larger systems, the molecules, with varied stability. Two atoms of hydrogen combine with one atom of oxygen to form water, which is very stable, and merely vaporizes at high temperature. Many kinds of molecules break down rather readily on applying heat, as when limestone (calcium carbonate) in a lime kiln gives off carbon dioxide gas and becomes quicklime (calcium oxide). More or less in line with molecules in structure, but with little stability and with many kinds of loosely associated molecules in watery solution, are the plants and animals. These become highly diverse in organization and reach a comparatively great size. That they are broken down or killed by heat is a common experience, as when food is boiled to kill the very minute bacteria that would otherwise decompose it. In well co-ordinated activity and highly complex activity through a relatively great nervous system, man is the highest in the series of organized living or active unitary systems of which we have knowledge that are based upon atoms. To what extent the atoms that are distributed through the universe are built up into complex unitary systems leading to plants and animals, elsewhere than in the earth, may only be conjectured. But, more or less of such development must surely be general. The will or energy that accomplishes this gives it value. The value lies in combining unity with diversity. It is universal to the extent to which there are such organisms throughout the universe.

With his goal of getting unity with great diversity, man tries to maintain a precarious balance between stability and activity through self regulation or homeostasis. The main part of his specific structure, as in a neurone, must be stable, but the activities involved in the functioning, in the replacement, or merely in the maintenance of that structure consist of ceaseless building up and breaking down of subsidiary details in structure. Too much stability prevents

activity and too much activity destroys necessary stability. Either may result in breakdown of the specific structure, that is, may cause death. Therefore, man has difficulty in appreciating the ideal of perfect stability, which can be achieved by lowering the temperature to absolute zero. He does appreciate the preservation of plants and animals by cold for his food. They are apt to be killed in the freezing process through its action on the water of which they largely consist. Apart from this, a temperature close to absolute zero would maintain their structure indefinitely. But, this lasting stability would be achieved at the expense of all the activity that we associate with the living of plants and animals including man. Great activity would remain in the atoms, but they would not change their arrangement. We can admire and make use of such stability in other beings, but we do not value it for ourselves. It is widespread through the universe where temperatures are low.

How far can we go in appreciating activity? We value a certain amount in ourselves. Our activity increases with body temperature, but we keep this so constant that we rarely experience the effects of temperature on activity, effects that are evident in the "cold-blooded" animals, that is, in those whose temperature changes with that of their surroundings. But, if our temperature should rise, as it does in a fever, it does not have to rise much to affect us unfavourably. A very few degrees of rise makes the conscious self delirious and may cause death. For ourselves, very little increase in activity becomes bad rather than good. Yet, we can admire and use a fire that would convert us to ashes. We value the intense activity that gives us light and heat, whether it comes from a fire or from the sun, so long as the heat and light rays that reach us are not too much. Such intense activity is widespread in the universe, as recognized by light reaching us from countless numbers of immense suns with tremendously high temperatures. Such explosive activity, so destructive to our living and to the stability or endurance that we prize, is not represented in our nature. Yet, since we value the greater activity of consciousness as compared with unconsciousness, we might well consider the much greater activity of the sun as

a much higher type of being than ourselves, one that we cannot expect to appreciate except vaguely.

SUMMING UP

Far from being isolated in a hostile universe, each one of us is always closely integrated in very many ways into a space-time continuum of energy, will or spirit. Through knowledge he not only may see the way for very full and free activity in harmony with the rest of the universe that surrounds him, but also may somewhat appreciate values that are beyond his reach with his very great limitations as a conscious human being. He needs to realize that he is basically one with the universe, however distinct he may seem to be as a part. Although appearing to be separate in body, mind and spirit, he shares in a tremendous, living whole.

III

Modern Psychology and Religion

W. S. TAYLOR

THERE ARE many signs today that the minister and the psychologist are drawing closer together in understanding and co-operation.

Several journals are now being published, for instance, devoted exclusively to pastoral psychology or psychotherapy, with many of the most prominent ministers and psychologists on the continent working together on their editorial boards. Chairs in Pastoral Psychology have been established in theological colleges, and courses in counselling and in pastoral psychology have become common. In January, 1930, the Council for Clinical Training was established, to assist ministers to secure practical training in psychotherapy under the guidance of leaders who themselves had received advanced training both in theology and in clinical psychology. Since its incorporation it has established training centres in more than two dozen general hospitals, mental hospitals and correctional institutions, and has given training to more than 1,500 ministers. Nor is it by any means alone in the field. Other similar programmes of training in psychotherapy have been made available for ministers elsewhere. Books on the psychology of religion and closely related fields, with a marked interest in the relationships of religion and psychotherapy, come off the press at what sometimes seems to be an almost alarming rate, and a Pastoral Psychology Book Club has been established. Things like these give

evidence of the remarkable growth of interest, during recent years, in the relationship of psychology to theology.

There is, however, another side to the picture. Some psychologists still regard a minister as the priest of an illusory system which may be useful in the sense that it helps to stabilize neuroses on a relatively harmless level, but cannot be expected to be really helpful in the cure of sick minds. Their attitude may vary from an outright scepticism to a friendly non-belligerency. If dropped into a Church service, or into a conference of ministers, they would feel they were in a strange intellectual world which had few points of contact with the world of psychological thought. Similarly some ministers still regard the psychologist as the practitioner of an esoteric art, with its own peculiar mysteries, which they feel is at best obscure, and may even be demoralizing. Many of them can quote instances of people who have been to a psychoanalyst, and who have come back to the minister again in a mental condition which, the minister feels, is worse than before. If dropped into a gathering of psychologists, they would find themselves in a strange intellectual atmosphere that left them bewildered, baffled, and somewhat resentful.

The picture is therefore not all of one bright colour. Relationships between psychologists and ministers are still mixed. The remarkably promising forms of co-operation developed in recent years have still some very stubborn feelings of suspicion to offset them.

This peculiar double attitude has been characteristic of the relationship between psychology and the Christian religion through almost all of the past century. To use a phrase which psychology has itself popularized, psychology has had an ambivalent relation to the Christian faith. Some aspects of modern psychology have made it more difficult for a person to maintain the Christian faith; other aspects of modern psychology have helped him to do so. Some types of psychological theory have come into sharp conflict with Christian doctrine; other types are hospitable to Christian doctrine.

An ambivalent relationship, however, can easily become dangerous—a fact to which modern psychotherapy bears ample

witness. Particularly if the ambivalence is unconscious, or if it is only obscurely present to the mind, it can produce destructive tensions with which the mind cannot cope. It is therefore important to analyze the nature of this ambivalent relationship between psychology and religion, bring the conflicting attitudes into clear light, and see them for what they really are. Fortunately these conflicting attitudes tend to occur in different periods of time, making it easier to disentangle them. They do of course, overlap and intermingle to some extent. Nothing else could be expected. There has, however, been a significant modern change in the climate of psychological thought,¹ of such a sort that developments unfriendly to the Christian faith can be separated from those friendly to the Christian faith without too great a simplification of historical facts. Developments unfriendly to the Christian faith were most marked in the latter part of the nineteenth and the early part of the present century. Developments friendly to the Christian faith have come into special prominence during the past quarter century.

Before starting to sort out these developments, however, two points need to be made clear in order to avoid misunderstanding. One has to do with psychology, the other with religion.

Psychological studies have become very complex. In little over half a century, psychology has developed from a relatively homogeneous discipline into a field of study as diversified as medicine or education. The American Psychological Association now has seventeen official divisions, without including psychiatry, or departments like parapsychology, psychosomatics, or the psychology of religion. In a single chapter it is obviously impossible to deal even superficially with so wide a range of psychological topics. We

¹Two examples will serve to illustrate the striking nature of the change:

(a) Sigmund Freud said that religion was a form of neurosis. A modern neo-Freudian psychoanalyst says a neurosis is "a private form of religion," just reversing Freud's position. (E. Fromm: *Psychoanalysis and Religion*, Yale University Press, 1950, p. 27).

(b) Early in this century, Freud was saying that character is a product of sex life. The same modern neo-Freudian psychoanalyst says "it is not sexual behaviour that determines character, but character that determines sexual behaviour." (E. Fromm: *Sex and Character*, p. 50, in D. P. Geddies and E. Curie (Eds.): *About the Kinsey Report*, Signet Books, 1948).

must practise strict selection, confining ourselves to a very limited field. For our purposes, the principles of selection can conveniently be stated in two propositions: First, we should choose aspects of modern psychology which are closely related to questions of religious faith and doctrine; second, we should choose aspects of modern psychology which pointedly illustrate significant modern changes in outlook. Both these principles of selection point to psychotherapy and the related psychology of personality as the best field of study.

Religion, like psychology, is a term which refers to a wide variety of differing, and sometimes almost contradictory, systems. The religion of early Buddhism, for instance, is radically different from the religion of Islam. Orthodox Hinduism is radically different from Protestant Christianity. Any effective discussion of the relation between psychology and religion must therefore indicate the particular kind of religion with which it is going to deal. Our discussion will have in mind the main tradition of Christian faith and doctrine as developed in the early Church and re-interpreted in the Protestant Reformation.

With our field of reference clarified to this extent, we can now start to sort out the negative and positive features of psychology's ambivalent relation to Christian doctrine and experience.

What features of modern psychology have been unfriendly to Christian thought? What features has Christianity found it difficult to accept without a decrease in the vitality of Christian faith?

Four of these can be briefly noted.

(1). The first is psychology's tendency to subjectivism—a tendency more marked in earlier days, before the rise of the contemporary emphasis on interpersonal dynamics, than it is now, but a tendency to which psychology is always liable by the very fact that it is concerned with character and personality.

Psychologists in the middle of the nineteenth century had no laboratories and few effective experimental techniques. Their studies were predominantly introspective, turning the mind's attention in upon itself. Even when psychological laboratories were

established, early experiments often concentrated on controlling distraction so as to facilitate more effective introspection. About the time objective experimental techniques were being developed, psychoanalysis also began to develop, and psychoanalysis reversed the trend to objectivity, turning attention back again upon the inner workings of the mind, which were found to be far more intricate than had previously been supposed. Psychoanalytic treatment, of course, did not aim primarily at subjectivity. Subjective analysis was only the initial stage in a process of cure. Its function was to make itself expendable, to lead on through a process of transference to a healthy rapport with objective reality.

Unfortunately for the influence of psychology on religious life, psychoanalysis caught the popular imagination far more effectively than did the objective studies of experimental psychologists, and, of the whole psychoanalytic process, the initial stage of subjective analysis caught the popular imagination to the virtual neglect of the later stages of transference and re-education. The result in popular thought was to exaggerate subjective self-analysis as an end in itself, rather than as a means to something better.

To recognize the religious significance of this development, one must see it both in the wide perspective of theological thought, and in the narrow focus of psychotherapeutic theory.

Western thought has its roots both in the Hebraic-Christian tradition, with its emphasis on revelation, and in the Greek tradition with its emphasis on reason. This uneasy dichotomy of revelation and reason persisted till the Renaissance. In the Renaissance, Descartes substituted for the dichotomy of revelation and reason a dichotomy of mind and matter, of subjective and objective, the subjective having primary certainty and being the seat of spiritual values. Man's search for spiritual truth was thus detached from objective reality, and redirected inward upon the Self. Modern thought, including theological thought, never wholly escaped from the problems created by this redirection of inquiry. During the latter part of the nineteenth century, and the early part of the twentieth century, theology and the philosophy of religion were struggling to overcome the effects of this Cartesian inheritance, and

to rediscover a rational justification for the orthodox Christian belief in an objective revelation. At just this moment in history, psychological influences were re-emphasizing, in popular thought, that inward turning of the mind which theology was trying to correct.

In terms of psychotherapeutic theory also, an excessive turning of the mind inward upon itself can be harmful. One of the commonest features of neurosis is this exaggerated concern about oneself, reducing one's chances of achieving healthy relations with others, and drawing a psychological curtain between oneself and reality. It operates in subtle ways that are difficult to deal with directly. The attempt to deal with the disorder sometimes seems to increase the disorder instead of relieving it. Where the mind is troubled by excessive self-concern, for instance, the very act of focussing attention upon one's self-concern increases concern about oneself. In anxiety states, awareness of one's own anxiety, by a peculiar circuitous movement, sometimes makes one more anxious than before. Subjective self-analysis can be harmful. It is true, of course, that it can be helpful in the initial stages of psychotherapy; just as excessive concern for bodily functions can be a normal initial stage in recovery from an operation, though one later learns to take bodily functions for granted as health is restored. But an exaggerated self-concern which is beneficial within the psychotherapeutic process can be disastrous outside that process; and the exaggerated popular interest in self-analysis did occur both outside any definite process of therapy and in isolation from other aspects of psychotherapeutic theory.

There is an interesting parallel between psychotherapeutic teaching about the danger of excessive self-concern, and theological teaching about sin. Sin, as Augustine and Luther recognized, is often a virtue turned in upon itself, festering like an ingrowing toenail. Even righteousness is a sin when it becomes self-righteousness. Christian doctrine counters this ingrowing tendency by setting man's whole life in an outgoing relationship to God in Christ. Psychotherapy counters it, at any rate in the later stages of the curative process, by creating an outgoing relationship with other people.

Unfortunately, the popular effect of psychoanalysis was to intensify self-concern without providing the means to transcend it.

(2). A second feature of modern psychology which created problems for religious faith was its relative neglect of voluntary choice. Voluntary choice was treated as being irrelevant to psychological studies, even when it had not been shown to be irrelevant. This was partly due to the elusive nature of choice itself, and partly due to the nature of psychology as a science.

Voluntary choice proved to be a particularly elusive thing to observe. Psychologists could study the conditions leading up to voluntary choice, and the effects following from it, but the act of choice itself tended to disappear when attention was focussed upon it. In this situation the temptation was almost irresistible to drop voluntary choice out of the picture, and to treat the conditions of choice as a sufficient explanation of the consequences of choice.

This tendency to neglect voluntary choice was supported by the growing emphasis on psychology as a science. Psychologists increasingly adopted scientific principles of explanation, though exact scientific experimentation was often beyond reach, even after the establishment of psychological laboratories. They shared the nineteenth century scientific belief in a causal system by which events could be adequately explained in terms of specific antecedent causes. As a consequence, explanations tended to be deterministic, and the neglect of voluntary choice was encouraged.

The effects of this scientific determinism were strikingly illustrated in psychoanalysis. The psychoanalyst, unlike the experimental psychologist, could not ignore the facts of personal choice and decision, since the psychoanalyst looked at life in the perspective of years, where the experimental psychologist isolated only a minute fragment for study. But though the psychoanalyst was forced to recognize the fact of choice, he could not, on account of his scientific presuppositions, admit the reality of free choice. He was compelled to interpret the fact of choice as a specific kind of determinism, namely as an act determined by psychological pressures.

This tendency to deny the reality of voluntary choice created real problems in the thinking of Christians who had been brought up

to think of the individual as a creature possessing a God-given power of choice, and responsible to God for his decisions. Psychology insinuated determinism into the core of personality, challenging this belief in man's capacity for responsible choice.

(3). A third feature of modern psychology which created problems for religious faith was the psychoanalytic emphasis on libidinal impulses. Libido was the name given to what are often called the lower elements in human nature, the biologically based impulses that link man with the rest of the animal world. Over against the Libido was the Superego, which was the name given to what are often called the higher elements in human life, the obligations and standards which belong to man as a social creature and help to distinguish him from the rest of the animal world. In Freudian thought, these are believed to be in constant conflict. Ordinarily a man represses the libidinal impulses out of respect for the standards imposed by the Superego. But the libidinal impulses, though repressed, are not destroyed. They continue to function in the Unconscious, waging a continuous though secret campaign against the Superego. This bitter, unconscious conflict produces neurosis and breakdown. The initial step in treating neuroses is therefore, according to Freud, to permit conscious expression of these repressed libidinal impulses, so releasing the tension and reducing the conflict.

Superficially this psychoanalytic theory of conflict between Libido and Superego sounds very like the Pauline conflict between flesh and spirit. Closer examination, however, shows marked differences, and it is just in these differences that psychoanalytic theory seemed to come into sharp conflict with the Christian faith. Christian theology said that sin and wrongdoing frequently consisted in rejecting the spirit in order to indulge the flesh. Freudian psychoanalysis said, in effect, that neurosis came from repressing the flesh in order to follow the spirit. Christian theology said that when a man was saved, his fleshly impulses were transformed by the power of the Spirit. Freudian psychoanalysis seemed to say that a neurotic could be saved only if he expressed his fleshly impulses before they were transformed. The issue went far beyond the level

of mere theoretical discussion, since the psychoanalysts produced a great deal of evidence, drawn from case records, to substantiate their theory, and the popularity of psychoanalysis induced a wide general acceptance of their point of view.

(4). The fourth feature of modern psychology to be noted is its treatment of reason. The troublesome effects of this development will be felt more in the future than they have been in the past, and will be felt more in the field of theology proper than in the field of popular Christian faith.

Traditionally, the concept of reason has been prominent, both in Christian theology, and in the philosophy of the Christianized western world. This is a point that hardly needs to be argued, as illustrations will come readily to the mind. Modern psychology, however, has greatly diminished the status of reason.

This has happened in two ways. In the first place, psychoanalysis demonstrated, from a multitude of case records, that reason could serve the purposes of rationalization, that reasoning was, in effect, a mental technique which frequently functioned as a tool of prior impulses and purposes. It demonstrated that reason could be a means of escaping from reality as readily as it could be a means of grasping reality. It consequently created deep suspicion about the *bona fides* of reason, as traditionally understood.

Experimental research into the nature of thinking also devalued the concept of reason, independently of psychoanalysis. Reason was found to be a blanket concept, covering a loose cluster of distinguishable mental functions. It lacked precise meaning. In order to achieve precision—the common aim both of science and of theology—psychologists had to break up this cluster into its several component parts. The more precise term intelligence has virtually replaced the older term reason in psychological literature, and, when the latter term is used, it refers only to restricted group or specific abilities. This change in the meaning of the term reason will have, in time, considerable effect on theological language and thought, for, when theology borrows a term from another discipline, it must try to use it with the meaning that other discipline gives to it. If, for instance, the traditional topic of revelation and reason is

rephrased, to conform to modern psychological usage, as revelation and intelligence, the nature of the theological argument will also alter considerably.

These, then, are four negative aspects of the ambivalent relation which modern psychology bears to the Christian faith, namely, its subjectivism, its neglect of voluntary choice, its emphasis on libidinal impulses, and its devaluation of reason.

The positive aspects of the ambivalent relation came to a climax of development during the second quarter of the present century. They are closely interrelated, and cluster about the major topic of personality, which has achieved remarkable prominence in recent psychological studies.

(1). Of these positive aspects, the first to note is a recovery of emphasis on the importance of voluntary choice. It has been recovered indirectly, as a necessary implication of other psychological discoveries. In modern educational psychology, for instance, the emphasis on learning by doing requires a corresponding emphasis on personal choice, since the doing which facilitates learning is a conscious, voluntary activity, rather than a mechanical performance. Modern counselling procedures also have re-emphasized the importance of voluntary choice, since the counsellor must do everything possible to facilitate a responsible decision by the counsellee. Most of the rules of good counselling are designed to achieve this end: the rule, for instance, that the counsellor must not intrude his own opinions lest the counsellee become dependent on him; or the rule that the counsellor must not hurry sessions, but give the counsellee plenty of time in which to develop an attitude of mind in which he can make his own decisions freely. Modern psychotherapy similarly insists that its function is to help the client work through his own problems and make his own decisions. As David Roberts says: ". . . psychotherapy is committed to the increase of man's capacity to achieve responsibility."²

This recovery of an emphasis on voluntary choice has also been facilitated by recent changes in the theoretic framework within

²Roberts, D. E.: *Psychotherapy and a Christian View of Man*. Chas. Scribners Sons, New York, 1950, p. 95.

which psychology develops its explanations. The earlier framework had been provided by mechanistic causal theories of nineteenth century science. More recently, these have been increasingly replaced by concepts drawn from the biological and socio-cultural sciences. As a consequence, psychology has increasingly come to use ideas like integration and organization, assimilation, growth and production—ideas which are more hospitable to a recognition of the importance of choice than were the earlier causal concepts.

(2). The second significant development to note has been a growing emphasis on the study of the total personality. Indeed, this is the clue to most of the other features we will note. In America, the publication in 1937 of G. W. Allport's,³ and in 1938 of H. A. Murray's⁴ books on personality gave clear public articulation to an interest which had been maturing for some time. These, and other similar studies in personality, provided a conceptual framework which made it possible to recognize the reality of what are ordinarily called higher values without reducing them to a mere function of biological impulses. They restored a promising picture of the individual as a unique centre of both responsive and productive activity, operating under the guidance of remote as well as immediate ends, and they helped to make obsolete earlier attempts to explain behaviour as a pattern of reaction systems, or as a field of tensions between conflicting impulses. Recent studies in personality are, however, only a beginning. They may, as Gardner Murphy⁵ says, show a distant view of the psychologist's promised land, but they have yet to take possession of the territory. Some of the implications of these studies in personality are given in the detailed comments that follow.

(3). The third significant development to note arises out of the use of what are generally called projective tests. It was early recognized that many areas of personality could not be studied by the use of traditional test materials, and projective techniques were developed to explore these areas. They frequently take the form of

³Allport, G. W.: *Personality: a Psychological Interpretation*. Henry Holt & Co., New York, 1937.

⁴Murray, H.A., et al.: *Explorations in Personality*. Oxford University Press, 1938.

⁵Murphy, Gardner: *Personality*. Harper & Brothers, New York, 1947.

incomplete picture or story material, which the observer interprets by drawing, often unconsciously, on his own experience to fill out what is lacking in the presented material. He identifies himself unconsciously with what he sees, so that his own experience and the presented material fuse in his perception of it. Since his interpretation of the picture or story is a result of this fusion, one can often, from the nature of this interpretation, get an insight into aspects of experience and character beyond the reach of other test procedures.

The new insights gained through these diagnostic methods have produced a change in psychological vocabulary. Words like introjection, empathy and projection have achieved new importance. It will be worthwhile to examine what is implied by the new status these words have acquired. Take, for example, the word "empathy." There are at least three important implications of the new status of this concept.

First, empathy implies something more fundamental than sympathy. Sympathy is an outgoing feeling of kindness toward another person who is still recognized as another person, and from whom one remains somewhat detached. Empathy is a kind of identification with another person, or with an object treated as a person, in which the awareness of separate individualities is minimal. Empathy is often quite unconscious; sympathy is normally conscious. There is a real difference between them, though they are far from being contradictories, or even contraries. Of the two, empathy is more wide-spread and fundamental, a fact which seems to imply that man is by nature at least as much social as he is individual, and that the feeling of belonging, or of community, is at least as fundamental as his recognition of his own distinctness.

Second, empathy may also help us to understand better the extraordinary process by which something external to us, and even imposed by external sanctions, can in time become a spontaneous expression of one's own character. One thinks at once of rules of courtesy and cleanliness, imposed on a young child at first by force, which in his later life are practised spontaneously as an expression of his own desires. One thinks of other laws, civil and moral, similarly introjected into an originally unreceptive mind in such a way that

they become eventually native to it. Even more important is the way in which ideals originally foreign to the mind can be absorbed and transformed into autonomous principles. One thinks also of the symbolic truth of the Biblical story, starting with laws graven on external tables of stone, and moving on, through the promise of laws internalized and written on the heart, to the picture of the new man in Christ living the laws as spontaneously as though of the very household and family of God. It may be that new insights into the functions of empathy will help us to understand better this vital process.

Third, the emphasis on empathy is also changing our estimate of Freudian psychoanalysis. Freudian theory pictured a constant tension between superego and libidinal impulses. The Superego was formed by introjection into the individual's life pattern of standards and laws originally foreign to it. In early life the child, acting spontaneously according to its instinctive, libidinal impulses, came into sharp conflict with a restrictive external authority vested in its parents and in society. Through identification, this restrictive, external authority moved into the individual's own life pattern, and became his Superego. In the process, however, it did not basically change its nature. It was still restrictive, while the libidinal impulses were spontaneous; it was still in some degree foreign to the real self, an acquisition, not natural as libidinal impulses were natural. Early life was a struggle between a spontaneous individual and the restrictive authority of society; later life became a struggle between spontaneous libidinal impulses and the restrictive authority of the Superego. The nature of the conflict remained unchanged, though the field on which it was fought had altered. For Freud, this opposition of freedom and authority, of spontaneity and restrictiveness, seemed irreducible; there was no dependable way by which one could be transmuted into the other. They were real contradictories; and around this antinomy much of Freud's theory revolved.

This has been one of the most troublesome features of the inheritance modern psychotherapy received from Freud. Even a modern neo-Freudian like Erich Fromm, who in other ways has

moved a long way from Freud, still builds much of his thought around this irreducible antinomy. At this point the new insights, gained through the use of projective techniques and the study of personality, change the picture. From what is known of empathy and of internalization, we can see that the antinomy of spontaneity and authority need not be irreducible. What is originally external and restrictive can be assimilated and become an autonomous motive, to borrow phrases from A. Angyal⁶ and G. W. Allport.⁷ With such a change in outlook, psychological theory may find it easier to understand the theological doctrine that there is no unsolvable conflict between an authoritative God and a free individual.

(4). The fourth significant point to be noted arises out of modern counselling and psychotherapy. To the detached observer it had always seemed a little odd that psychotherapists of conflicting schools should be almost equally successful in curing the same basic neuroses. It almost seemed as though the psychological theories they maintained were largely irrelevant to the cures they effected, the cures being due to something else which they shared in common, without clearly recognizing its significance. Modern psychotherapists have increasingly seized on this neglected common element, and made it the cornerstone of their theory. They recognize that in every counselling and psychotherapeutic situation, therapist and client spend many intimate hours together, and build up an interpersonal relationship of a sort different from any the client knows elsewhere. This type of dynamic interpersonal relationship is in itself intrinsically healing, whatever theoretic beliefs the two participants may originally hold.

It does not follow that all types of interpersonal relationship are healing. Some are destructive. Modern psychotherapy makes one of its most useful contributions by helping us to distinguish the one from the other. The distinguishing marks are significant. For the patient, the healing relationship must be one which will permit

⁶Angyal, A.: *Foundations for a Science of Personality*. The Commonwealth Fund, New York, 1941.

⁷Allport, G. W.: *Personality: a Psychological Interpretation*. Henry Holt & Co., New York, 1937.

him to discard his pretences and his fears. It must permit him to lower his protective defences, particularly those unconscious defences which have prevented him from knowing the truth about himself. It must permit him, in the company of the therapist, to examine even the most unpleasant facts about himself without fear of being rejected when they are known. This imposes a very heavy burden on the therapist. He must be sympathetic without allowing the patient to play on his sympathy and misuse it. He must be emotionally restrained without allowing his restraint to seem like coldness or indifference. He must be scrupulously honest about his own moral standards without allowing himself to express either shock or condemnation over the moral lapses of the patient. He must understand the patient's problems better than does the patient himself, without disclosing solutions till the patient has found his own slow way towards them.

Psychotherapists sometimes speak of this healing attitude as being one of honesty and permissiveness. It is difficult to find any more familiar phrase to describe the attitude, but it does not seem to be radically different from the attitude which Christian theology attributes to God, and which Christians should strive to copy—an attitude built around the twin poles of justice with mercy, and of complete knowledge without rejection. Similarly, psychotherapists speak of the patient's attitude in a truly healing relationship as being one of self-acceptance, meaning thereby a capacity for complete self-knowledge, without vanity or false shame, without bravado and without pretence—an attitude which does not seem to be radically different from the Christian virtue of humility.

(5). The fifth significant point to be noted has to do with the tension between individual and community, which was reflected in Freudian theory, and which can be seen acted out in modern ideological conflicts. How can the rights of the individual be reconciled with the rights of the community, without one being sacrificed to the other? Psychotherapy has thrown some light on this problem. Outside psychotherapy, general psychological theory has also offered illuminating suggestions. Every person, it is suggested, is characterized by two complementary tendencies. One is the

tendency to what Angyal⁸ calls autonomy, that is, the tendency to develop an integrated, self-governing organization within the individual himself, relatively independent of the environment. This makes for unique individuality. The other is a tendency to what Angyal calls homonomy, that is, a tendency to identify oneself with a larger social group, and to subordinate one's private interests to community values. Both these tendencies are original characteristics of human nature, generally operating unconsciously, though they can also become consciously realized and acted upon. Neither is more fundamental than the other. In normal development they complement each other in such a way that autonomy and homonomy, or individuality and community participation, both achieve their maximum development at the same time and in the same situation. Only in abnormal development does the balance between them turn into open conflict.

It is, therefore, of the first importance to discover what kind of situation can produce at the same time this double development of interrelated tendencies. Fortunately, common everyday experience provides numerous examples to guide us. It can happen whenever different individuals take part in joint activity governed by common purposes. It can happen, for instance, in group games, where each person plays his individual best only when the team is at its best, and where the team can be at its best only when each individual member is playing his best. It can happen, also, in group cultural activities, like choral or orchestral or dramatic work, where the individual members can do their best only when the group as a whole is at its best, and vice versa. It can happen also when a man and a woman, in love with each other, marry. They both feel, perhaps for the first time in their lives, that they are really themselves, at the very moment they surrender their individual freedom to form the family group. Losing oneself and finding oneself are inseparable aspects of the same healthy act.

Over against the four negative aspects of psychology's ambivalent relation to theology can now be set five positive aspects, namely: a recovered sense of the significance of voluntary choice; a

⁸Angyal, A. *Op. cit.*

concern for the whole personality; an increased emphasis on empathy and related functions, arising out of the use of new types of personality diagnosis; a recognition of the intrinsically healing character of good interpersonal relations; and a recognition of the reciprocal interdependence of individual and social maturity.

Consideration of these five points is by itself sufficient to explain why the climate of opinion is today more favourable to co-operation between minister and psychotherapist than at any time since the development of psychoanalysis. Nevertheless it will be worthwhile to turn briefly to the theological side of the picture to illustrate this same fact.

Consider Christian belief about redemption. This belief rests on at least three presuppositions: that God is in some sense personal; that God knows our sins, even the most shameful of them, better than we know them ourselves; and that God, without condoning our sins, does not cast us off, nor wholly reject us, because of them. These are strikingly similar to the characteristics which a modern therapist is expected to show if therapy is to be truly healing. Theology and psychotherapy seem to speak a similar language, though the former deals with God's relation to man, and the latter with man's relation to his fellowman. It must be admitted that in the history of theological thought the significance of these three presuppositions has sometimes been obscured. In modern theology, however, their significance is being recognized again. This is partly due to the modern emphasis on I-Thou, Subject-Subject, or interpersonal categories of thought as basic to a Christian understanding of God. John Baillie,⁹ indeed, says that this new understanding of other selves, which grows out of the recognition of interpersonal relationships, is theologically the most hopeful development in modern times. It may be, therefore, that modern psychotherapy, with its demonstration of the intrinsically healing character of healthy interpersonal relationships on the human level, will be able to contribute something to our understanding of the intrinsically

⁹Baillie, J.: *Our Knowledge of God*. Charles Scribner's Sons, New York, 1939, pp. 201, 204.

redemptive character of the interpersonal relationship established by a personal God with human beings.

Or consider Christian belief about God's attitude to man. The Christian believes that God will not unilaterally solve all man's problems for him, even though He has the power to do so, but will encourage man to make his own decisions and accept responsibility for them. Even though God provides the means of salvation, man must accept it before it can become fully operative, and may reject it if he will. Man's freedom to choose, and his responsibility to decide, are real, though without limiting the real power of God. Modern psychotherapy, similarly, says that the therapist, even when he has the knowledge and power to solve the patient's problems for him, must refrain from doing so. Even at the risk of the patient's refusing to be healed, he must do nothing to encourage an unhealthy attitude of dependence, or to discourage the patient's exercise of personal responsibility. In psychotherapy this relationship is accepted as right and proper. Knowledge of psychotherapy may therefore provide an analogy which will make it easier to understand the apparently paradoxical Christian belief in both the real power of God and the real freedom of man.

Or consider Christian belief about transcendence and immanence. The Christian believes both in the real transcendence of God and in His real immanence. Paraphrasing the idea to relate it more obviously to psychological thought, one might say that the Christian believes both in the real external authority of God and in His real inner spontaneity. In theology the two are generally regarded as complementary, rather than contradictory, aspects of truth. The external authority of God can also be an internal law, written on the heart. The nature of the process by which this occurs may be obscure, but its reality is, for Christian theology, not in question. Here again modern psychology has a point of contact, recognizing, as it does, the importance of the process of internalization, by which the dichotomy of external and internal, of authority and freedom, can be overcome. It may be that in time psychology will help to throw light on the working of this mysterious process in which theology firmly believes.

Consider, finally, Christian belief about the Kingdom of God. It is a complex and difficult belief to explain, except by statements that are balanced in complementary pairs. The Kingdom of God is realizable in the life of the individual and also in the life of society. It involves the full development of the individual, and also the full development of a society transcending the individual. It is God-given, beyond the individual's power to create for himself, yet it also requires the best efforts the individual can contribute. Statements like these, which seem difficult to integrate into a single consistent theory, may become more easily understandable when set in the framework of a psychological theory which recognizes that autonomy and homonomy, to use Angyal's terms, are inseparably interconnected.

In spite of these important areas of agreement, there are still very significant differences. The minister is not just a special kind of psychotherapist, nor is the psychotherapist a special kind of minister. Psychology and theology, as intellectual disciplines, are not merely variants of each other. They do not compete with each other in the same area; they complement each other in adjacent or overlapping areas. The interesting fact is that the limitation in one corresponds to a strength in the other, each supplying something the other needs.

Psychology and psychotherapy are limited primarily to relationships between people, psychotherapy particularly being concerned with people in immediate personal contact with each other. Two people can be sensibly aware of each other in visible, audible, tangible ways, giving the relationship between them a concrete immediacy that explains much of its power. However, this human relationship is largely at the mercy of space and time. When people become separated by long distances, the interpersonal relationship sensibly weakens. The passage of time has a similar effect. Psychotherapy, for instance, depends for its success on frequent, intimate, personal contacts between therapist and patient. Long intervals of time between contacts will greatly reduce, and may wholly destroy, the value of the therapy. Just because these frequent interviews are needed, the therapist can treat very few

people, and the benefits of psychotherapy are necessarily limited to a minute portion of the people needing help.

To correct these weaknesses of psychology and psychotherapy, some kind of dynamic interpersonal relationship is needed which is relatively uninfluenced by vagaries of space and time, which can remain a man's permanent possession wherever he may be, and whose healing effects can be made available to people who never see a psychotherapist.

The Christian faith provides, and Christian theology describes, this kind of relationship—an interpersonal relationship between God and the individual, which in its nature transcends categories of space and time, and which, in man's conscious experience, appears in forms that are also relatively independent of variations in space and time.

Even more important, however, is the fact that this interpersonal relationship is with a God who is unaffected by the little weaknesses which even the best human therapists show, and who is culturally neutral in the sense that, while he can communicate through any culture, he cannot be reduced to a stereotype of any culture. For the individual this means that religious self-valuations can have, in a favourable religious atmosphere, an objective stability beyond the reach of self-valuations arising out of unstable human relationships. Where God is as real to the individual as are other people, the religious relationship provides him with a kind of dependability which human therapists strive for, but never wholly achieve. For humanity in general, on the other hand, the cultural transcendence of God means that every individual, whatever his culture, can, through his interpersonal relationship with God, achieve by a means common to all men a distinctive kind of personal maturity, which can never be identified with that of people in other cultures, though it can be shared with them.

Christian faith is strong where psychotherapy is limited.

Psychotherapy may, in its turn, however, help to correct a weakness in ordinary Christian faith. The interpersonal relation between God and man, which is basic to the Christian faith, and which is made concrete and specific by the appearance in history of

Christ, often lacks concrete immediacy in the Christian's own experience. The divine person, God, is not sensibly present in visible, audible or tangible forms, as are other people. Even the concrete immediacy of God's revelation in Christ, who was visibly, audibly and tangibly present to the people of his own day, tends to be weakened by the intervening centuries. It may be that psychotherapy, in its turn, will be able to help Christian theology understand more adequately, and describe more clearly, ways in which the abiding presence and healing power of God can become present in men's experience with a concrete immediacy as real as that accompanying the presence of other people.

Looking back, as we have done, over developments in modern psychology, we can understand why the movement toward closer co-operation between psychologist and minister has developed so rapidly. We can understand, also, why co-operation is still regarded with suspicion by some people.

With the rapid growth of friendly co-operation between psychologist and minister, we need to be on our guard against falling into the modern error of expecting too much of their joint efforts, where the older error was to expect too little. There are still many differences which need to be ironed out. The problems of the immediate future are likely to be found in an area which we have not dealt with. They will be concerned with the unconscious presuppositions of psychological theory, rather than with the methods or conclusions of psychology. The psychologist's point of view often reflects presuppositions which are at variance with the tenets of the Christian faith, though the psychologist himself may not be aware of this. One of the problems of the immediate future is to draw out these presuppositions more clearly, and examine them in relation to Christian theology. If the psychologist and the theologian can in this way eventually achieve a substantial measure of agreement about the presuppositions with which they both work, nothing could be better. If, however, they cannot achieve agreement, the clear understanding of differences in underlying philosophy will at least prevent the occurrence of unexpected irritations

arising out of hidden disagreements, and will, to that extent, make possible closer co-operation than has yet been achieved.

Fortunately, the contemporary climate of opinion does show signs of encouraging a fruitful co-operation based on mutual understanding and respect. Modern emphases on study of the total personality have made psychologists increasingly aware of the fact that man's nature cannot be fully understood if the things with which religion deals are left out of the picture. "There may be a touch of neurotic phobia in the persistence with which the modern study of man has evaded the question of his need in some way to come to terms with the cosmos as a whole . . . our study of man must include the study of his response to the cosmos of which he is a reflection."¹⁰ On the other hand, ministers and religious workers are increasingly recognizing that they need the specialized skill and understanding which the psychologist and the psychotherapist are developing. In spite of setbacks and misunderstandings, the outlook for closer co-operation between them, with mutual respect on both sides, seems more hopeful now than at any time since modern psychology began its astonishingly rapid growth.

¹⁰Murphy, Gardner. *Op. cit.*, p. 919.

IV

Man and His Lack of Community

MURRAY G. ROSS

MAN IN the modern urban community is socially impoverished, politically impotent, and spiritually all but dead.

This very negative appraisal of modern man is not simply the reaction of the pessimists among us today. It is the judgment of some of our more thoughtful philosophers and the conclusion of some of our more competent social scientists. The picture is not a pleasant one. It is one which suggests that man, far from realizing his potentialities, suffers partial paralysis in his development.

This is not to say that urban civilization has not resulted in many benefits. Technological and industrial developments have brought many rewards, and in the future, automation will bring even more. With industrialization has come unprecedented prosperity, leisure, and material goods for the common man. In addition, extensions of welfare services have all but secured the "welfare state" in Canada and have provided a floor of economic security hitherto unknown in this country. Then, too, the growth of the urban centre has meant that clusters of students of art, literature, science, philosophy, etc., have been able to find mutual stimulation and resources that have made possible advances in all these fields. Undoubtedly, also, many individuals have found in the city a new freedom and release, which has contributed to their personal growth. Yet in spite of these developments and advan-

tages, the average man in the urban centre finds his life has little meaning, his human relationships little depth or significance, his voice of little importance in the affairs of his work or his community. In reaction, he turns to all kinds of escape devices which "hucksters" and other manipulators of mass advertising have convinced him are the fruits of the good life to which he is entitled. Thus, he becomes a heavy consumer of tobacco, liquor, slick magazines, television, movies, and two-tone automobiles which cover up, in part at least, his loneliness and feeling of insignificance. It is terrifying to consider the implications of the prediction of some mental health experts that there would be a very considerable increase in mental illness if modern man were denied the opportunity to see television, sports, movies, and cheap periodicals for a period of even two weeks. If there is any validity in this, the props of our society are, indeed, of flimsy quality.

SOME ASPECTS OF COMMUNAL LIFE

The fact that man in the community is seldom closely related to his fellowmen is a condition which must eat into his sense of dignity and significance. But the modern community hardly provides for, much less encourages, such relationships. The impersonality, the rush, the cultural patterns which press for conformity, and the incessant and incredible concern with impressing others favourably—these hardly permit a condition in which man develops intimate and significant association with his fellowman. For, as Wright Mills suggests, modern communities

are not communities in any real sense of the word, but unplanned monstrosities in which as men and women we are segregated into narrowed routines and milieux. We do not meet one another as persons in the several aspects of our total life, but know one another only fractionally; as the man who fixes the car, or as that girl who serves our lunch, or as the woman who takes care of our child at school. Pre-judgment—prejudice—flourishes when people meet people only in this segmental manner. The humanist reality of others does not, cannot, come through.

In this metropolitan society, we develop, in our defence, a blasé manner that reaches deeper than a manner. We do not, accordingly, experience genuine clash of viewpoint. And when we do, we tend to consider it merely rude. We are sunk in our routines, we do not transcend them, even in discussion, much less by action. We do not gain a view of the structure of our society as a whole and of our role within it. Our cities are composed of narrow slots, and we, as the people in these slots, are more and more confined to our own rather narrow ranges. As we reach for each other, we do so only by stereotype. Each is trapped by his confining circle; each is split from easily identifiable groups. . . .¹

In a study of attitudes, a few years ago, a relatively large sample of young people was asked what advice they would give a friend who was involved in a critical personal problem and who now, quite distraught, had come to them for advice.² The advice most frequently suggested was that the best thing to do was to "keep busy." This is an aspect of a dominant pattern in our community which emphasizes "going," "doing," "seeing," for the sheer sake of action, as if such action, in itself, would make up for the frustrations, loneliness, and lack of real contact with one's fellowmen. In *Knowledge for What?* Lynd, discussing the lack of balance of institutions in the community, makes this same point when he says:

It is this structural distortion, with the elements so unequal and out of balance that the sheer preservation of the going system becomes a monopolizing preoccupation, that presents one of the most striking aspects of our culture. To the resulting general sense of strain may be traced the compulsive overemphasis upon aggression rather than affectionate mutuality, upon action rather than upon repose, and upon doing rather than feeling.³

The political impotence of modern man in his community is widely known and requires but brief mention here. The percentage of eligible voters who cast their ballots is consistently low in all parts of Canada, and few of those who vote are deluded by the belief that

¹C. Wright Mills: "Are We Losing Our Sense of Belonging?" Paper delivered at Couchiching Conference, Canada, August 10, 1954, pp. 8, 9.

²Murray G. Ross: *Religious Beliefs of Youth*. Association Press, New York, 1950.

³Robert S. Lynd: *Knowledge for What?* Princeton University Press, 1948, p. 70.

their vote provides them with any significant influence over the course of events in their community. Numerous studies, such as Lynd's *Middletown in Transition*, Hunter's *Community Power Structure*, Meyerson and Banfield's *Power, Politics and the Public Interest*, and Mills' *The Power Elite* all reveal the same pattern in the community. The real decisions—the "big decisions"—are made by a small powerful elite and often without consideration of the interests of the common man. The conclusion of these studies is that the average individual has negligible, if any, influence on the course of events in his community in the United States. What evidence we have in Canada does not contradict these findings.

What is important for us, here, is that man is aware of his political impotence. And this, surely, gnaws deeply at his sense of worth. In a study, to which reference has already been made, young people were asked whether they felt their lives counted, whether they felt that as individuals they were of importance in the community. The replies to this inquiry revealed the fact that the respondents were all too aware of their own lack of influence or control over any of the major forces which would shape, and to a considerable degree determine, their lives. Many could confront the question only with difficulty, for it seemed to open an abyss of dismal quality. Reality, when it is of this nature, is not easy to face.

As to man's spiritual condition, little needs to be added. The flood of people to churches, to the resources provided by *The Power of Positive Thinking*, and to the pleading of Billy Graham, may be interpreted as expressing a need, a desire, and a search rather than a spiritual renaissance. Unless all recent research in this area is invalid, people do not need to be convinced that there is a God or that they need to pay Him certain deference. What they lack is a capacity to make His existence relevant in their own lives. And there is no evidence that the furore of "religious activity" mentioned above is bringing about this relationship.

Almost every substantial study of religious beliefs shows that the large majority of people on this continent believe in the existence of God. Further, most believe in the value of prayer, in church attendance, and in sending their children to Sunday School or

Church School. There is no question about the nature of religious beliefs. The question, as already suggested, is the relation of these beliefs to attitude and practice. And here one finds an outstanding illustration of the schizophrenic personality of our time. Certain religious beliefs and values are cherished and idealized, but many of the people who hold these beliefs behave on the basis of a completely secular philosophy. We believe one thing; we act on an entirely different basis. Thus, young people who profess to believe in God, and who rank "faith in God" as the most important thing in their lives, state that their most important concerns at the present time are that of getting a decent job, enough money to live on, and developing their own personalities. Further, in dealing with such concerns, such items as giving the matter careful thought, discussing it with friends or parents, are ranked almost three times as frequently as such items as prayer, Bible reading, or talking it over with a minister, priest, or rabbi.

These data are summarized in the following:

On the one hand, this youth group are almost unanimous (96.5 per cent) in saying that modern man needs religion, more of them say that "faith in God" rather than any other item on the list is of first importance to them, and almost a third (28.9 per cent) would advise a friend in a difficult situation to turn to religious resources in time of great difficulty. On the other hand, few of the group (3.6 per cent) think of "God's plan for their life" when alone, few of them (10.4 per cent) consider "God's will" or "social and spiritual development" as part of their major goal in life, few (9.7 per cent) identify Jesus or other religious personalities as among the people most admired, few (23.8 per cent) rely on traditional religious practices as their primary source of help in solving a problem, and (even giving a broad interpretation to "religious resources") less than half (39.2 per cent) rely on such religious resources when deciding what is right or wrong.

Are these contradictions, however? Or is it that "religion" and "faith in God" are part of the American ideal structure, and that these constitute the kind of things which are considered to be "fundamental in American life," a part of the "American way" and "essential to success?" As long as these are vague symbols, they are not only almost unanimously "accepted," i.e., verbally subscribed to; they are chosen in preference to specifics—what one is

really concerned about, what one is most interested in, the best way of dealing with one's problems and needs. But when one faces "real life," these vague and idealized objects cease to exist for most persons, and they turn to their actual interests and goals and methods of obtaining them. There is a good deal in this chapter to suggest that a very large percentage of this group (perhaps 70 per cent) conceive of religion in this way, and that for them religion, in the sense in which we (and they) define it, is little more than a vague set of terms and explanations which they "accept" as "true" and "valid" but which has little operational relevance to their belief or value system.⁴

All of this is depressing evidence of the plight of modern man. Perhaps it does not take adequate account of the numerous individuals who have developed an adequate and consistent philosophy, who have found significant relationships with others, and who through their alertness and activity have placed limitations and controls on the power of the elite. But what has been described are the effects of broad social trends on mass society, the influence of forces which diminish the dignity of man, the impact of technical advances which, as Erich Fromm suggests, create machines that act like men but is leading to the development of men who behave like machines. Too frequently modern man experiences himself as an object, a commodity. "His value as a person lies in his saleability, not in his human qualities of love, reason, or in his artistic capacities."⁵

COMMUNITY MOVEMENT

The question now arises as to the manner in which we may deal with the situation described above. Even those who feel we have been unnecessarily negative will recognize the need for programmes which will provide for improved mental health, a wider participation in the affairs of the nation, lives of greater poise and serenity. The widespread recognition of this need has resulted in a great variety of measures designed to relieve and improve the situation.

But, just as we recognize that the problem is multi-dimensional

⁴Ross. *Op. cit.*, pp. 116, 117.

⁵Erich Fromm: *The Sane Society*. Rinehart & Co., New York, 1955, p. 356.

and multi-causal, so we would recognize that it is unlikely that any single programme would remove all causes and provide a cure for the problem we are discussing. Advocates of a single remedy are unrealistic and insensitive to the nature of the problem they seek to cure. Thus religion, counselling, psychotherapy, political action, community reform, recreation, education, etc., all have their advocates, and each of these measures undoubtedly has its values. But it must be apparent that none of these, by itself, will adequately deal with the problem described. When, therefore, we discuss various forms of community movement, we will be seeking patterns of change which may alleviate man's partial paralysis and provide for a fuller life, but we do not anticipate that any such changes, by themselves, will provide a cure-all for the problem of contemporary man. Community movement, however, may not only support but may do a good deal to nourish other programmes of change and reform in the community and larger society.

Briefly, there are two major approaches which may be considered for community change. One includes all those ideas and efforts which rest upon the assumption that there must be a whole and complete restructuring of the basic patterns of community life. Partial, or even gradual, change is not feasible, since the network of institutions reinforce each other, and must all undergo change at the same time. Thus, Erich Fromm in *The Sane Society* states bluntly that:

Our only alternative to the danger of robotism is humanistic communitarianism. The problem is not primarily the legal problem of property ownership, nor that of sharing *profits*; it is that of sharing *work*, sharing *experience*. Changes in ownership must be made to the extent to which they are necessary to create a community of work, and to prevent the profit motive from directing production into socially harmful directions. Income must be equalized to the extent of giving everybody the material basis for a dignified life, and thus preventing the economic differences from creating a fundamentally different experience of life for various social classes. Man must be restored to his supreme place in society, never being a means, never a thing to be used by others or by himself. Man's use by man must end, and economy must

become the servant for the development of man. Capital must serve labor, things must serve life. Instead of the exploitation and hoarding orientation, dominant in the nineteenth century, and the receptive and marketing orientation dominant today, the *productive orientation* must be the end which all social arrangements serve.

No change must be brought about by force, it must be a simultaneous one in the economic, political and cultural spheres. Changes restricted to *one* sphere are destructive of every change.⁶

Many of the conceptions for restructuring must be considered as utopias and would include such efforts as Robert Owen's New Lanark and the Brook Farm experiments.⁷ But there are also "live" communities such as the various forms of collective settlements in Israel, the Kibbutz, the Moshav, and the Moshav Shitufi in which the community is structured in a way which its members feel will support a particular kind of balance between individual freedom and co-operative living. One must consider here also those supporters of communism and socialism who would quickly and radically alter the structure of social and community living.

The other approach rests on the assumption that within the present structure of the community, significant steps may be taken which will provide man with an opportunity to relate to his fellows as he participates in the improvement and reconstruction of the community. It is the application of this assumption which we wish to explore here, for it seems not only more practical (in the sense of possibility of realization) but also to hold potentiality for the gradual learning of new ways of living which is, perhaps, the only way that new cultural patterns are absorbed and assimilated without excessive social cost.

In our communities there are numerous ways in which this may be undertaken, and of these we will identify three rather different approaches. These we will call the *reform orientation*, the *planning orientation*, and the *process orientation*.

⁶*Ibid.*, p. 361.

⁷For a description of some of these communities see Harry W. Laidler: *Social-Economic Movements*. Thomas Y. Crowell, New York, 1948, pp. 3-117.

THE REFORM ORIENTATION

In this approach it is usual for an individual or small group to seek action in respect to a specific reform or project they think is desirable and of benefit to the community. The reform may be that of changing the penal code, enacting legislation to provide for public housing, securing more adequate transportation facilities, increasing allowances to widowed mothers, etc. Or there may be a project in mind—the establishment of a new recreation centre, a new marriage guidance clinic, a new programme of well-baby clinics, etc. Whatever the particular reform or project may be, it is important to note that this (the reform or project) is the primary objective of the individual or group. The group has a conviction that the reform or project they advocate has merit, and the focus of their work is that kind of action which will secure the reform or project. Their conviction about the need for this reform or project may be based on research, on professional judgment, or on a particular value or belief system. But what is fundamental, perhaps, is that at this point the conviction is formulated, the answer is known, the goal is clear. They approach the community with their minds already made up. When the interest of others is solicited, it is not to explore the need or to modify the plan; it is to secure support for action of a particular kind.

What distinguishes this position is that a minority group, be it the United Church, the Canadian Legion, or the Welfare Council, seeks to secure an end it believes to be desirable in, and for, the community. The steps taken to reach the goal vary greatly.

In some situations, *direct action* by the group concerned is possible. It may be that the group needs only call to the attention of officials a laxity in the enforcement of certain legislation or to unmet needs which could be met under existing legislation. Or the group may have sufficient authority, status, or power to secure its ends either by pressure or by proceeding with the reform or project on its own (e.g., it may raise the money and build a new home for unmarried mothers). Thus, *direct action* may be an adequate method in some situations.

But the problem of securing its ends may be more complicated. It may be known that other individuals and groups in the community are either indifferent to the group's proposal or that they oppose it. In such a case, sufficient support must be obtained in the community to assure successful action. Either of two methods may be used. In the "sales method," the group seeks to sell the community and to win over the opposition by persuasion. The arguments for the proposal are put forth in speeches, in discussion groups, in newspaper columns, in film strips. Authorities supporting the proposal are quoted at length, the evils which the reform or proposal seeks to remedy are described in detail, and the soundness of the reforms proposed is emphasized. This "educational campaign" is often an essential aspect of the reform orientation.

Another method of securing action here, not exclusive of the other methods described, is the organization of a large *committee* or "*conference*" *group* to support the proposed reform. Usually the committee or "conference" is not called together to formulate another proposal, but to provide support for the proposal formulated by the original group. There may, of course, be exploration of the need, or a variety of reforms, or other aspects of the problem, but the committee or "conference" is not organized to develop another solution but to endorse and support a solution already decided upon. The real purpose of constituting the committee or calling the "conference" is to help implement this solution.

There are, of course, other variations here, but perhaps this description is sufficient to distinguish one specific approach to the community—that in which a minority group seeks to secure goals it considers desirable in the community. This approach represents common practice in North American society. It is undoubtedly acceptable practice in a democracy such as ours, and provides a means by which any alert group of citizens may seek improvements in the life of the community.

For those who have an opportunity to participate in such activity there is a very significant potential for learning something about the nature of our social and political systems, a rather invigorating sense of participation in a reform movement of impor-

tance, and often a very real sense of achieving an end of value. Unfortunately, perhaps, such activity is too seldom evident at the local community level, and when it is found, it too often represents the effort of some very small group seeking community improvement or a vested-interest group intent on securing material advantages for itself. But the need to reactivate social action around problems about which large numbers in the community are concerned is apparent if we accept the premise that such activity may not only make for community improvement and enliven our political system but may, as well, provide many individuals with an opportunity for self-realization.

PLANNING ORIENTATION

In this approach there is a difficulty, a feeling of concern, an awareness of a problem which an individual, group, or organization feels should be explored. This concern may be specific, such as awareness of the financial difficulties facing families on relief, or quite general, such as the feeling of the need for better educational or recreational services in the community.

Here the purpose is exploration and, if necessary, action. It is not, as in the reform approach, to begin to move towards a particular solution. Rather is the orientation that of planning—of exploring the nature of the difficulty and means for its resolution. The orientation of the planning approach is, then, quite different from the reform approach. It is obvious, however, that should the planning group develop conviction about a particular solution, it may then follow some phase of the pattern suggested in the reform orientation, although as will be shown this is not the only method for securing action.

The planning task may be assigned to a professional group or to a committee, although frequently it is a co-operative undertaking. The formation of the committee is, however, revealing of the purposes and nature of the planning task. It may be a "traditional committee"—organized because deep in our culture is the practice of forming committees to deal with such problems. If this is the prime

motive—because it is “the thing to do” or because “all such decisions are made by committees”—the committee is often made up of the “old reliables” all of whom hold essentially the same point of view; a view which is probably representative of a very small segment of the community. Another pattern is the “committee of experts” in which the persons in the community with special knowledge of, or competence about, the problem under discussion are brought together to formulate the plan. Or, there may be organized a “power committee,” the members of which are prominent members of the power hierarchy in the community, people who are probably able to secure implementation of any plan upon which they agree. A different pattern is the “interested-persons committee” which seeks to bring together those individuals with a special interest in the problem under discussion. Thus, a committee formed to consider juvenile delinquency would have on the committee an outstanding youth worker in a church, a juvenile court judge, a police officer noted for his work with youth, a well-known public recreation worker, etc. (It must be noted that seldom do the advocates of this method go so far as to include some of the individuals most interested, such as parents of delinquents or even juvenile delinquents themselves.) Still another pattern is to bring together on the committee, representatives of the major groups interested in the problem, or likely to be affected by the decisions made, to provide what we call the “inter-group committee.” Here the groups most concerned are asked to send representatives to the committee. Thus, a committee on juvenile delinquency would ask the Y.M.C.A., the Juvenile Court, the Mental Health Clinic, the Public Recreation Department, etc., to send representatives to work through this problem and to formulate a plan, satisfactory to all, for its solution.

Obviously, a committee may be organized which combines some of these patterns, and in fact this is often the case. Nonetheless, it is useful to delineate the patterns of organization in this way, for it suggests some of the differences in orientation that exist. These may be classified (if we leave out the traditional committee) as representing a desire: (a) to have a good (i.e., technically ade-

quate) plan, thus the use of experts is essential; (b) to have a plan that will be implemented, thus the use of power figures in the community; (c) to have a plan that is accepted and supported by *individuals* who have an interest in a particular problem area; this represents, often, both a desire to have a plan that will work (i.e., not be opposed by professional or other vested interests) and a desire to have such persons learn to work together on a common problem; and (d) to have a plan developed and supported by the *groups* most concerned in the community; here also the objectives may be twofold, namely, to have a plan that is acceptable and to secure collaboration among these groups.

It is often said that the advantage of the planning orientation is that it does not give the community the answer but engages persons in a search for an answer. As will be evident from the above, however, often the planning is carried out by a small group who approach the community only when they have determined the solution—thus this approach is merely the beginning phase of the reform orientation. But there are other possibilities here. If the community, or the major class, ethnic, or religious groups in the community become concerned about a problem, come together to explore ways by which this problem can be dealt with, they may (even though the technical planning is done by a small committee appointed by them) set in motion a process of problem-solving and action at the community level which may well make for increased interest, participation, and involvement on the part of residents in the community. A new zest and sense of relatedness may be the reward for those so engaged, and a considerable advance in ability to work together, the result for community groups.

PROCESS ORIENTATION

Here the purpose is to initiate a process by which a community seeks to identify, and take action in respect to, its own problems. The purpose is not, as in the reform orientation, to take action to secure a specific reform, although this may at some point be involved; nor is it, as in the planning orientation, to plan in a par-

ticular problem area, although such planning may also be undertaken at some appropriate point. The purpose here is to encourage the community itself to identify what it considers to be its problems and to work systematically on these problems, in the belief that such an experience will increase the capacity of the community to deal with problems which will confront it in the future. It is assumed that if the people of a neighbourhood, town, or city can be stirred in respect to a problem which is of deep concern, men will begin to work together in significant association, will begin to exert some control over their environment, and will begin to realize some of their potentialities.

This approach is based on some of the same assumptions as are found in psychiatry, namely, that growth and change are possible only when the individual is sufficiently disturbed and sufficiently dissatisfied with his present situation so that the prospect of change is less of a threat than is retaining his present status. In struggling with his problem, the individual may not only solve or partially solve his problem but, more important, may develop techniques for problem-solving and capacity for growth and integration. It assumes that a community, in which there is widespread discontent with some specific situation, can mobilize and organize itself on a voluntary basis to deal with this situation and in so doing may find new strength and capacity to deal with other community problems. Thus, a problem about which there is profound discontent in the community provides the opportunity for community action and growth. In such a situation, people sunk in apathy may leave their retreat; groups that have been isolated from, and indifferent to, other groups in the community may be willing to establish relations with these other groups; and even the deeply prejudiced may find themselves working with those against whom they are prejudiced—all because the object of their discontent is greater than some of these negative attitudes and practices. Such developments are frequently found when we unite against a common enemy, as in time of war, or flood, or other disaster. It may also develop around an acute problem in the community, as the following brief account illustrates:

The — neighbourhood council began because the people in this neighbourhood were up-in-arms about the lack of police protection in this area. There had been several acts of violence, the saloons were breaking the law right and left, kids were getting liquor and dope, and the situation was pretty bad. Some folks got together and called a public meeting, at which block captains were appointed. A petition from each block was prepared, a delegation was sent to city hall, and the group put forward its views in no uncertain terms. They did fairly well, several saloons were closed and they got regular police patrols.

The neighbourhood was so enthusiastic about their success that they wanted to continue. At this point they asked for our help and we assigned a professional worker to serve as their consultant. They carried on with a club in every block in the neighbourhood, each club sending two representatives to the council. Over the years they've worked on rat elimination, clean-up campaigns, T.B. detection campaigns, housing and redevelopment, expansion of play areas and recreational programmes, and many other matters. They worked on things that were important to everyone in the neighbourhood. They've learned to work together and they've gained recognition everywhere in the city. In spite of a lot of moving in and out of the neighbourhood, it has developed a real spirit of unity and the feeling that there aren't many problems that it can't handle itself.⁸

There are undoubtedly many problems in any community about which many persons in that community have deep feelings which they allow to lie dormant. The pattern of non-participation and inaction is deeply imbedded in the life of the community and represents a "socially-patterned defect." This is true to such an extent that the interested, alert, and active citizen is considered by many to be an odd species who would be better occupied in other things. The assumption upon which the *process orientation* rests is that it is healthier that these discontents be identified, discussed, and acted upon rather than allowed to lie dormant. Such discontents provide the basis for individual and community awakening, for a fresh interest in community affairs, for the development of new community capacity to deal with community problems.

⁸Quoted in Murray G. Ross: *Community Organization: Theory and Principles*. Harper & Bros., New York, 1955, pp. 22-23.

Needless to say, such action, which involves the majority of citizens at the community level, becomes increasingly difficult as the size of the city increases. But it is claimed that it is possible in small towns, medium-sized cities, in urban neighbourhoods, in suburbs, and in functional communities (i.e., among groups with common interests or functions of sufficient importance that they come together in a common organization such as the Councils of Churches, or the Metropolitan Y.M.C.A., or the Welfare Council in any given geographical area). It may well be that in large cities the revitalization of interest and sense of participation in community affairs for many citizens must take place through the development of meaningful functional communities.

In any case, the purpose here is to stir members of a community to act together in matters of common concern. The objective is not simply to remove the problem, but to help people find significant community endeavours, to learn to work together, and to develop capacities for collective action on common problems. The assumption, again, is that in such a process man may not only remake his community but may find himself.

It is obvious that these three approaches to community change are not discrete entities. They are related and, in fact, may all be parts of one process. But the elaboration of each may indicate the differences in goals that are to be found in community projects. In many community projects it is simply assumed that "good" will follow, but it should be obvious from the above that the nature of the primary and secondary goals may make for very substantial differences in methods and procedures.

TOWARD A NEW APPROACH

We assume that deep in our heritage is the desire to construct a quality of community life which assures man of meaningful relationships, a reason for being, and increasing control over his collective destiny. Many find themselves sympathetic to this view, yet, recognizing the immensity of the forces making for mechanization

and centralization in our lives, consider all modest efforts for change as futile and all major efforts to reconstruct our social life as utopian. To accept such a position is not only defeatist but unreasonably pessimistic. A more realistic and healthier attitude is, perhaps, one of empiricism and a willingness to encourage and study experiments of various kinds.

In some respects, we are trapped in any effort to promote a collective reconstruction of the community. We want individual citizens of a community to be interested and active in the development of communal life, yet we recognize that the very character of the present community mitigates against such interest and encourages apathy, prejudice, and various escapes from the world of reality. A sick society spreads its disease among its members. Yet only these members can cure the illness of society. If society is the patient, who is the physician?

The argument often runs, therefore, that if our society were only different, men would be different, but "in this situation little can be done." Few readers will share this view, for it neglects the basis for hope that man can change the nature of his environment, and in striving to do so he can cast off the shackles of apathy, insignificance, unrelatedness, and impotence. "Man in so far as he acts on nature to change it, changes his own nature," said Hegel, and in this lies the foundation for movement away from a disease that grips the modern community. For in struggling to improve his communal life, man may not only take the first feeble steps toward creating a new quality of community life, but in such a movement he may himself move toward a new level of dignity and relatedness. Thus, man may make minor improvements in his community, this latter encourages further effort, which in turn provides for individual development, which in turn makes for communal growth, which in turn provides for further opportunities for self-realization, etc. To expect rapid results, however, is unrealistic. As the psychiatrist recognizes that time and patience and effort are required to release a patient from a lifetime of irrationality and destructive relations, so we must acknowledge that communities which are sunk in a tradition of passivity will not

respond readily to stimuli towards self-improvement. But given this article of faith—that gradual change is possible—what is the most productive way to encourage this movement?

The value of the reform and planning approaches is obvious in a free society in which a minority group must have the opportunity to present its point of view to the larger community. Unfortunately, the reform and planning groups are, as suggested, too frequently confined to small groups of citizens, and their work scarcely influences the pattern of life of the masses. Unhappily, also, their activity may represent a practice in the community which encourages the psychological withdrawal of many people from active participation in the life of the community. For the reform and planning groups represent the “good” people of the community who are always doing that which they believe needs to be done for the masses of people in the community. As the child learns certain attitudes and behaviour patterns when his parents provide for his every need, so the people of a community learn indifference when others consistently make judgments of what their needs are and take actions consistent with these judgments. What incentive is there to think, to strive, to act in the community when one is excluded (by tradition, by one’s conception of a “problem” or by race, socio-economic status, religion, etc.), from membership in the reform and planning groups and when community action is the prerogative of these groups and the politicians?

Not only may the active citizen, in his sophisticated and exclusive reform or planning group, increase the probability of apathy in the community; he may take action which, if not resented, is at least not appreciated by the very people for whom his reforms are intended. This is most apparent in some of our foreign-aid programmes. A recent *New York Times* report on aid to Afghanistan is typical. After investing close to \$40 million in a major water project to help the people of Afghanistan, the results of the project are described in part as follows:

Men who for centuries had used the most primitive agricultural methods and had thirsted for water did not understand the importance either of leveling the land or of leaching it of its salt

content. Suddenly endowed with an abundance of water, they drowned their land, raising its salt content to the point of ruination. This land can be reclaimed but the process is expensive.⁹

One of the experts sent over to help on this project writes: "My assignment was as an agricultural economist to advise on problems of land use . . . but the amount of visible accomplishment has been very disappointing, my advice has not been sought in any important matter and that volunteered has been rejected in nearly every instance."¹⁰

We are rapidly discovering that good-will is not a sufficient basis for a foreign-aid programme. It is interesting, in fact, to note that the United States, which has been extremely generous in helping "underdeveloped" countries, enjoys little respect in many of the countries for whom it has provided aid. What is true in the international community may well be true in the local community. Here it is not a dam but a settlement house, a church hall, a family service agency, a health centre, that is provided. In most cases these are useful services, but they represent what some small group conceive to be services which will meet the needs of "the people" and are services provided *for* these people. The reaction to some of these "give programmes" by those for whom the programmes are intended is not unlike the reaction in foreign-aid countries.

Perhaps it is time we developed skill in helping people to identify their own needs and in encouraging them to strive themselves to deal with these needs. Rather than reform and planning *for* others, the *process approach* emphasizes the need to involve people themselves in recognizing and accepting responsibility for communal problems. That this is possible is evidenced, in part at least, by the growth of more than five hundred neighbourhood councils in the United States and by the gradual recognition in functional communities that it is not sufficient that policy and direction be established at the upper levels of the organization but that an effort "to spread the area of shared concern" be made.

⁹Peggy and Pierre Streit: "Lesson in Foreign Aid Policy." *New York Times Magazine*, March 18, 1956, p. 56.

¹⁰*Ibid.* p. 58.

Change in the pattern of participation and involvement in the affairs of our modern community will not come readily. We can emphasize, as in psychiatry, that "no new patterns can be learned unless the motivation to acquire them is greater than the motivation that promotes the survival of the existing neurotic habits."¹¹ Thus, the emphasis on discontent, the effort to have people themselves realize they must confront communal problems about which they feel deeply, the stress on widespread participation and involvement in dealing with these problems.

This is not to suggest, as already indicated, that other methods, from counselling to political movement, may not have value. It is simply to stress the importance of community movement and reconstruction in which the people have some part—both in determining direction and in control. It is to suggest that if some of the effort devoted to "doing good" for others were devoted to helping people come to grips with their own problems, some of the difficulties of modern man enumerated in the early part of this chapter might gradually disappear.

¹¹Lewis R. Wolberg: *The Technique of Psychotherapy*. Grune and Stratton, New York, 1954, p. 497.

V

Logical Analysis and Mysticism

JOHN A. IRVING

DURING THE nineteenth century the idealism of Hegel dominated philosophical thought in western culture. Idealism had a breadth, an authority, and a speculative insight into ultimate reality unrivalled by any subsequent system. Its exponents were the critics not only of science and theology but of all other special approaches to reality. Idealists performed their distinctive philosophical function from the standpoint and in the name of a reality transcending all human and temporal limitations. But for all its speculative grandeur and quasi-religious inspiration, idealism failed to mould the temper of twentieth-century western culture.

At the beginning of the twentieth century the long dominance of the Hegelian philosophy in Europe and America was already drawing to a close. During the period from 1900 to 1925 the most conspicuous new movements in philosophy were the phenomenology of Edmund Husserl in Europe; the pragmatism of Charles Peirce, William James, and John Dewey in the United States; and the new realism of Bertrand Russell, G. E. Moore, and Samuel Alexander in England. The latter tendency was also represented in the United States, in a somewhat different form, by such men as E. B. Holt, H. G. Spaulding, W. P. Montague, and R. B. Perry.

Of these new movements, the greatest impact on the public mind was made by the American pragmatists. They attempted to

exhibit philosophy as a creative and liberating agency in ongoing human activity. Emphasizing the common nexus of theory and practice, they studied the psychological and sociological functions of philosophical ideas. Confronted with the rawness of a pioneer civilization, they proclaimed their faith in the capacity of man's intelligence to solve all the issues raised in the flow of time. In the instrumentalist version of Dewey, pragmatism fashioned North American educational philosophy for succeeding generations. But it also raised to the level of self-conscious knowledge in western culture the broadest implications of science, democracy, evolution, and progress.

Today, phenomenology, pragmatism, and realism, while they still have articulate champions, are receding into the past. Having driven out German idealism, they have been challenged, during the last thirty years, by three new approaches. The latest movements in the order of their appearance, are: (1) logical analysis (also called, in its various manifestations, logical positivism, logical empiricism, therapeutic positivism, and linguistic analysis); (2) existentialism; and (3) the meeting of East and West tendency (not yet academically christened) under the brilliant and energetic leadership of F. S. C. Northrop. In addition to these three movements two great systems of philosophy developed in the past—Thomism and Dialectical Materialism—enjoy today the official favour of the Roman Catholic Church and the Communist Party respectively.

The second of the most recent movements, existentialism, has won little or no acceptance among philosophers in the Anglo-American world, although certain neo-orthodox theologians have welcomed it enthusiastically.¹ The third tendency may be considered as a phase of the ecumenical movement in its largest aspects. For Northrop, there are two valid approaches to reality—the conceptual approach of the philosophical and scientific traditions of western culture and the mystical approach of the religious traditions of Oriental cultures like Hinduism and Buddhism. The limitations

¹For an exposition of the present writer's attitude to existentialism see his *Science and Values* (The Ryerson Press, Toronto, 1952), Chapter IV, "Thoughts on Existentialism."

of western culture may be overcome by the acceptance of the Asian way to Nirvana.²

Significantly enough, logical analysis, the most dynamic and influential of the three contemporary movements in western philosophy, also takes us to mysticism. In the present chapter it is proposed to examine certain phases of the philosophy of logical analysis, with the object of showing the significance of this approach for mysticism.

In its immediate origin, logical analysis arose out of the realistic reaction to British idealism, under the leadership of Bertrand Russell and G. E. Moore. But the sources of its widespread influence today are to be found in many other aspects of modern philosophy, science, and culture. Philosophically, logical analysis may be traced on the one hand to Hume's empiricism and on the other hand to developments in mathematical logic arising out of the work of George Boole, Gottlieb Frege, G. Peano, Bertrand Russell and A. N. Whitehead. Scientifically, its development was influenced by the methodological writings of Karl Pearson, Henri Poincaré, and Ernst Mach. All of these tendencies converged in the luminous mind of Ludwig Wittgenstein, who published in 1921 his *Tractatus Logico-Philosophicus*.³

Culturally, the philosophy of logical analysis mirrors the intellectual climate of today. The popular intellectual qualities in our culture are detachment, subtlety, professionalism. As John Holloway has brilliantly commented, one can trace clearly in the new philosophy that has developed from Wittgenstein's work

the modern intellectuals' distrust of pious, fine-sounding, vague generalities, the scientists' admiration for minute and dispassionate analysis, a complexity and subtlety like that typical of all the contemporary arts, and in its later stages an emphasis on organic and

²For an exposition of Northrop's philosophy see his *Meeting of East and West*. The MacMillan Co., New York, 1952.

³It has recently become fashionable to say that Wittgenstein effected two, quite different, transformations in modern philosophy. Be that as it may, the present chapter is concerned entirely with the doctrines set forth in the *Tractatus*. It must be insisted, however, that Wittgenstein never forgot the two propositions of the *Tractatus* that are essential for our present interpretation: (1) *Philosophy is not a theory but an activity*; (2) *Whereof one cannot speak, thereof one must be silent*.

functional enquiries as in ecology or modern anthropology or economics. One should remember this continuity with our whole contemporary culture, if only in justice to the subject; for philosophy is far too often accused nowadays of shirking its traditional responsibilities to man and society, and retiring into a linguistic hair-splitting isolation.⁴

The work of Wittgenstein, the central figure in the philosophy of logical analysis, was made possible by Frege's discovery that natural numbers are not found in experience like the colour "blue" but are concepts by postulation, and by Russell's discovery that the linguistic form of a proposition is not always identical with its logical form. These discoveries caused a technical convulsion in philosophy. Russell's more restricted proposals for the resolution of the philosophical difficulties that arose as a result of these developments were generalized by Wittgenstein into a comprehensive programme for the future of philosophy. This was a fateful step in the history of philosophy, a step that could have been taken only by a man of genius. Wittgenstein was a genius.

In a paper on "The Future of Philosophy," presented at the Seventh International Congress of Philosophy at Oxford, on September 5, 1930, Moritz Schlick declared that the truth about the real function of philosophy was first seen with absolute clearness by Ludwig Wittgenstein. Schlick then recommended to the philosophical world Wittgenstein's view that philosophy is neither a set of doctrines, nor a theory, but an activity. "The object of philosophy," Wittgenstein had announced in the *Tractatus*, "is the logical clarification of thoughts," and he had then continued:

Philosophy is not a theory but an activity.

A philosophical work consists essentially of elucidations.

The result of philosophy is not a number of "philosophical propositions," but to make propositions clear.

Philosophy should make clear and delimit sharply the thoughts which otherwise are, as it were, opaque and blurred.⁵

Such is the basic creed of the philosophers of logical analysis.

⁴John Holloway: "The New Philosophy of Language in England." *The Hudson Review*, IV, 1951, p. 448.

⁵Ludwig Wittgenstein: *Tractatus Logico-Philosophicus*. Kegan Paul, London 1922, prop. 4. 112, p. 77.

With the above brief account of the background of the philosophy of logical analysis in mind, I shall now attempt to show: (1) how the method of logical analysis proceeds; (2) what the philosophical implications of this method are; and (3) how this method leads to mysticism.

The simplest way to indicate how the method of logical analysis proceeds is to give actual examples. So I shall give three very simple examples. First, "The author of *Waverly* was a poet" is analyzed as: "One and only one man wrote *Waverly*, and he was a poet." Second, "This is an orange" is analyzed as: "This sense-datum seems to me to have characteristics a , b , and c and is a part of the surface of a certain physical object (a , b , and c being qualities such as colour, shape, etc.)." Third, "This is an orange" is analyzed more completely as: "This sense-datum has certain properties a , b , and c , and is in a certain relation R to an event which is in a certain relation P to a series of events such that P is the ordering relation. A , b , and c are qualities such as colour, shape, etc., and R might be 'being caused by' and P might be a complex relation including 'being caused by,' 'being qualitatively similar to' and 'being spatio-temporally contiguous to'."

I do not want to discuss now whether these particular analyses are correct or not. What I do want to discuss is the method according to which they proceed and the theory on which the method is based. If we examine the examples I have given, in each case we find that a long and rather complicated proposition has been substituted for a short and simple one. We also find that the short and simple one is such that there is not likely to be much argument about its truth or falsity; but that the long and complicated one may seem very debatable. What precisely are we doing when we substitute the one sentence for the other?

Before I can state clearly the answer to this question, I must make a few preliminary definitions. In the first place, by *proposition*, I mean any set of symbols which is used to express a fact. If the fact which it expresses is the case, then the proposition is true. Hence a sentence or form of words is a proposition when it is used to symbolize a situation. But if it is simply repeated over by a parrot,

it is not a proposition. By *fact*, I mean the same as situation; it can always be expressed in the form *that so and so is the case*. A situation is such that immediate awareness of any situation serves to verify the proposition which expresses it. These definitions are not as good as they might be, and a whole treatise might be written discussing the difficulties which they involve. I am quite conscious of this, but if I tried to discuss these difficulties I should never get on to what I want to write about, so I put the definitions forward simply to indicate how I am using my words.

Let me return to my examples. Both the simple sentence and the complicated one, which I call the analysis of the first, are used as propositions to indicate a certain situation. The second is only an analysis of the first if they express the same situation. But the two propositions do not function as wholes: they have words as constituents, and the difference between the two sentences is that their constituents are not the same. Now the first sentence in each of my examples is such that the whole sentence indicates the situation which would verify it, but the constituent parts of the sentence do not stand for the constituent parts of the situation or for groups of its constituents parts; while the second sentence is such that the constituent parts of the sentence correspond to the constituent parts of the situation it expresses.

We are now able to see why the one proposition is called an analysis. It is really the situation which both the propositions express which is analyzed by the second proposition; and the so-called analyzed proposition is important because it not only serves to indicate a situation but also to exhibit the structure of the situation which it indicates.

This account helps to clarify the modern notion of *logical fictions*. A logical fiction may be defined as what an incomplete symbol stands for. An incomplete symbol is any word which functions as part of a proposition which is such that its constituent words do not stand for the constituents of the situation which it expresses. For example, in giving an analysis of propositions about propositions, we would find that there is no word or group of words which can be said to mean the same as the word *proposition*. That

is, in the structure of the situation which is expressed by a proposition about a proposition there is no constituent or group of constituents which the single word *proposition* can be said to stand for. Hence the word *proposition* is said to be an incomplete symbol, and we may call the thing for which the word stands a *logical fiction*. By this I mean that we can talk intelligibly about propositions, for propositions about propositions indicate situations; but the word *proposition* by itself stands for nothing.

The importance of analyzing propositions is therefore this: we do as a matter of fact use sentences to indicate situations when the constituents of the sentences do not correspond to the constituents of the situations, and in analyzing propositions we exhibit the structure of the situations, by expressing them by sentences which have the same structure.

It is obvious that philosophers are interested only in certain *abstract* characteristics of situations; the other aspects they leave to be discussed by natural and social scientists. The question may therefore be asked: Do philosophers only analyze certain types of propositions, leaving other types over for the natural and social scientists? And if this is the case, how is the one type of proposition to be distinguished from the other? The answer is that philosophers do not analyze special types of propositions, but that they do a special type of analysis. A philosopher analyzes a situation in order to exhibit its structure, and its structure is determined by the way in which its constituents, together, make up the situation, whatever the particular characteristics of the constituents may be. A scientific analysis of a situation is an analysis of the individual constituents. For example, take the proposition, "Tigers are striped." The philosophical analysis is: "If anything is a tiger, it is striped." That is, the structure is of the form "If anything has θ it has $\Psi = (\chi). \theta\chi \supset \psi\chi$." But a zoologist might profitably ask what exactly is included in *being a tiger* and how these characteristics are connected with stripiness. The answer to these questions would be irrelevant to philosophy.

It is important to notice that a satisfactory philosophical analysis has been given when a situation is shown to be made up of

certain constituents put together in a certain way. This is an exhibition of the structure of the situation. The fact that these constituents may themselves be made up of other constituents and so on, infinitely, does not mean that we can never reach a satisfactory philosophical analysis. For, when we analyze a proposition, we substitute a sentence in which the constituents stand for the constituents of the situation for a sentence in which they do not. Further analysis would only consist in showing that single words in the analyzed sentence stand for groups of constituents of the situation. This analysis might possibly go on infinitely, but it is of an entirely different and comparatively unimportant kind.

At this point another question may be asked: what, on this view, is the distinction between logic and philosophy? The analysis of propositions which I have been describing may appear to be a purely logical process, for logic is concerned with the structure of propositions and so is the process of analysis which I have described. But logic is concerned with the structure of propositions *as such*. Logicians must investigate the different structures of propositions and show how and when we are justified in inferring one proposition from another. And if the constituents of a given proposition do correspond to the constituents of the situation, then that proposition can only signify the situation if the structure of the proposition and the structure of the situation are the same. Hence the statements of the logicians about the structure of propositions equally apply to facts.

But when we analyze propositions in the way I have been describing, we try to find out what is the structure of the situation indicated by a given proposition. We therefore do not proceed by classifying different possible structures of propositions and elucidating their relations, but proceed by trying to find out which of these different possible structures a given situation has. It is thus clear that logic is not the same as this process of analysis; but we see how useful logic is in the analysis for (1) it shows us what possible structures to look for, and (2) it shows us what we are justified in inferring from a situation once we know what its structure is.

We analyze propositions by examining the situations to which the propositions refer. I now want to go into the actual process of analysis in greater detail. I shall begin, for the sake of simplicity, by considering the case in which it is generally admitted that we *know* the proposition we are analyzing. Then we begin by saying that in some sense or other we know the proposition in question is true. The question is: what is the sense in which it is true; that is, what is its analysis? Now usually when people know propositions they have some ideas about what sense it is in which they know them, i.e., they have some ideas concerning the structure of the situation about which they are talking. So usually the philosopher starts off by finding out what these ideas are. For example, Professor C. D. Broad, in *Scientific Thought*, gives an account of what he takes to be the common sense idea of the structure of the situation in which two people see the same penny. Usually when we have done this, we find internal inconsistencies in the so-called common sense view. But even if there are no inconsistencies, we have not justified an acceptance of the view until we have examined the situation.

The question now arises, what exactly is this situation we talk about so much? How can it be examined? In the preliminary definitions I said that the situation expressed by a proposition was what verified the proposition. So what we must examine are the data which verify the proposition, if they are the case. When we have discovered exactly what would serve to verify a given proposition, we have analyzed the situation which it expresses and we are now able to give a proposition which exhibits the same structure as the situation. This proposition serves to indicate the situation and to exhibit its structure, so that we have completed our analysis. This account throws light on what Wittgenstein means when he says that the meaning of a proposition is its verification, and when he talks about things which can be *shown* but not *said*. The structure of a situation is one of these things.

In the process of our analysis, we have done two things: (1) we have shown what is the structure of the situation which we know to be the case; (2) we have incidentally criticized our beliefs about

what this structure is. At this point it may be said, "All this sounds very well. But do we *really* ever know a proposition to be true without at the same time knowing what is the structure of the situation which it indicates?" I should like to call the kind of knowledge which we have when we both know a proposition to be true and know the structure of the situation which it indicates, elucidated knowledge, and the kind of knowledge we have (if we ever do have it) when we know a proposition to be true and do not know the structure of the situation which it indicates I should like to call unelucidated knowledge. Then the question becomes, "How is unelucidated knowledge possible?" We have unelucidated knowledge whenever we know a proposition which indicates a situation without exhibiting its structure. The question, how is such knowledge possible, is therefore the question how is it possible for a proposition to express a situation without exhibiting its structure. This is a question about the way in which symbols function. It does, as a matter of fact, seem to be the case that sentences with very simple structures serve to indicate situations with a very complicated structure. How exactly this is done is a very complicated problem, the solution of which involves a discussion of nearly all the questions connected with the functioning of symbols and I therefore do not feel that I can discuss it in detail here. I should like, however, to point out that the problem is even more complex than this. For, we find that a proposition with a simple structure is verified by a situation with a complex structure, and we find that people using propositions of this kind use them to signify not only the complex situation which would verify them but also beliefs about the structure of this situation. This may be clarified by an example. The proposition, *This is a pen*, may be verified by looking at *this*, and then taking it up and writing with it; and a possible analysis of this proposition might be: "This visual sense datum has a special sort of shape and is connected in some specific way with a physical object with certain causal properties." This analysis is not complete because I do not say what a "physical object" is, nor in what way the visual sense datum is connected with it. Various different theories would provide different com-

plete analyses and I do not want to discuss these theories now. But, whichever we choose, it must be a theory about what actually does serve to verify the proposition. But an ordinary person making the judgment may believe that the pen is a persistent thing, with certain causal properties, and that when I see the pen I actually am aware of the qualities of some part of the surface of this persistent substance. Now these beliefs are not, as a matter of fact, verified when the person verifies the proposition; and a critical examination of them may even show that it is impossible that they should be verified since our experience makes them mutually inconsistent.

The problem is, therefore, how can a simple symbolic structure be used to signify a complex situation, and at the same time be used to stand for unverifiable beliefs about this situation? I do not wish to try to solve the problem here, but I should like to indicate various lines of approach: First, there is the question of why the sentence has one symbolic structure rather than another. The answer to this question must be given by the science which deals with the growth and functioning of language. For the considerations governing the structure of language actually in use are purely pragmatic. Language is used primarily as a method of communication, not as a means of making an exact analysis of situations. Hence, any symbolic structure which effectively indicates a situation will do. Second, there is the question of how symbols convey meaning; and in particular how a simple symbolic structure can mean both a complex situation and a belief about the situation. This question seems to be purely psychological. Third, there is the question of the origin of the beliefs which such symbolic structures symbolize. I want to discuss this last question in a little more detail. These beliefs are always beliefs about the way in which the data which serve to verify the propositions are organized. Now exactly how such beliefs arise is a psychological problem. But how they function, when once they have arisen, is a philosophical question since they are philosophical beliefs. Two suggestions have been offered: (1) that we are so constituted that experiences of a certain kind invariably cause us to have certain beliefs about their

organization; (2) that certain methods of organizing our experiences are the most practicable and are therefore adopted.

Whatever the explanation may be, once these beliefs arise, they themselves are one of the causes influencing the structure of language; and are therefore relevant to the first question I raised, why language has one structure rather than another. We actually do often find that the structure of the proposition when it is not the same as that of the situation which it symbolizes is the same as the structure which popular belief ascribes to the situation which it signifies.

One of the most common of philosophical errors is to be misled by this fact and to suppose that the structure of the situation signified is the same as the structure of the proposition when, as a matter of fact, this is not the case. For the sentence, "lions exist," has the same structure as the sentence, "lions fight." In the situation symbolized by the latter proposition, the logical subject is "lions." Hence we are led by the similarity of symbolic structure to suppose that the logical subject in the situation symbolized by the former proposition is also "lions," i.e., things with certain characteristics. Hence we are led to suppose that existence is a property of lions and this leads us, eventually, to all sorts of problems and puzzles.

But actually the situations indicated by these two propositions have quite different structures. The analysis of the proposition "lions exist," is, "being a lion has application." Being a lion obviously, means having certain properties which we will call θ for short. Hence, the analysis of "lions exist" is of the form " θ has application," while the analysis of "lions fight" is of the form, "If anything has θ it has Ψ ." The real logical subject in the former proposition is thus an adjective or set of adjectives, and we are asserting that there is something or other to which they apply.

So much for the problems dealing with the functioning of symbols. I have not solved these problems; and hence I have not succeeded in showing how what I call unelucidated knowledge is possible. But I think I have succeeded in showing that symbols do, as a matter of fact, function in such a way that unelucidated knowl-

edge can exist. For we do find in use propositions which have a different structure from the situation which they symbolize. When we analyze such propositions, we (1) show what is the structure of the situation which they signify, (2) state the beliefs which they are also used to signify. The clear statement of the structure of the situation enables us to see what part of these beliefs is actually verified, and what probability, if any, the verified part gives for the unverified. When we have unelucidated knowledge, we know that a certain situation is the case; but we are not clear as to what exactly this situation involves; and we have not clearly distinguished our beliefs about the situation from our knowledge of the situation itself. Our analysis substitutes for this vague knowledge the precise or elucidated knowledge that a situation with a certain definite structure is the case, and distinguishes from this our beliefs about the situation.

I began by considering the case in which the proposition analyzed is one which we know. There is also the case in which it is disputed whether or not we actually do know the proposition to be analyzed. The procedure then is exactly the same; except that we have to look for the situation which would serve to verify the proposition if we found it to be the case, instead of examining the situation which, as a matter of fact, has verified the proposition. If we find that there is a situation which *would* verify the proposition, if it were the case, and which is such that it is possible for us to discover whether it is the case or not, then we have found that the proposition to be analyzed is one which we *can* know. If we find that the only situation which would verify the proposition is such that we should never know for certain whether it was the case or not, then we have found that the proposition to be analyzed is one which we could only know to be more or less probable. In this case, the analysis of a proposition shows clearly what we should know if we knew the proposition to be true; and also serves to distinguish those propositions which it is possible to verify, and therefore to know, from those which cannot be verified, and therefore cannot be known.

We can thus briefly describe the activity of analyzing propositions as a method of clarifying our knowledge by substituting

elucidated for unelucidated knowledge. It gives us no knowledge of new facts; it does not tell us what situations are the case; what it does do is to elucidate our knowledge of the situations which we already know to be the case by exhibiting their structure.

I have now completed the discussion of the process of the analysis of propositions. When we analyze propositions we substitute elucidated for unelucidated knowledge. I now ask the profound question: *Can philosophy ever give us any other sort of knowledge than this?* Logical analysts believe that knowledge is of two kinds: (1) knowledge gained through immediate experience; (2) knowledge of self-evident logical principles. Philosophy obviously does not give us knowledge of the kind gained through immediate experience. Philosophy equally obviously does give us knowledge of self-evident logical principles.

But analysis of these self-evident logical principles has succeeded in showing that all self-evident propositions have a certain kind of logical structure. This analysis has consisted in an analysis of the relation of entailment. Wittgenstein has shown that whenever we can truly say that *p* entails *q*, where *p* and *q* are propositions, the truth conditions of *q* are included in the truth conditions of *p*. Since a proposition is the expression of its truth conditions, it follows that such propositions are really tautologies:

The propositions of logic are tautologies.

The propositions of logic therefore say nothing.

(They are the analytical propositions.) . . .

The fact that the propositions of logic are tautologies *shows* the formal-logical-properties of language, of the world.⁶

It follows that inference is simply analysis, and consists in selecting one element from a complex of knowledge and dropping the rest. Hence the discovery of logically necessary truths is also a result of the elucidation of our knowledge, and is not the discovery of new facts.

Besides the knowledge gained through immediate experience and the knowledge of necessary truths, there is the knowledge that

⁶*Ibid.*, props. 6. 1, 6. 11, 6. 12, pp. 155-157.

we get from science. This appears to be the knowledge of probabilities, based on data we get from immediate experience, according to the logical principles of probability insofar as they are agreed upon. This scientific knowledge represents an attempt to achieve a unified conception of nature; and regard for the principles of probability makes it clear that the so-called "scientific method" is the best way of making such an attempt.

What sort of knowledge does there remain for philosophy to give us? *The knowledge of first principles* falls under the knowledge of self-evident logical principles, and has been shown to depend on the elucidation of unelucidated knowledge. There is *Cosmology*, which is an attempt to achieve a unified conception of nature; but so is science. The principles of probability make it clear that the difference between the two is that the scientific method is the better one and even that can only give us more or less probable conclusions.

Another possible activity for philosophy is the so-called speculative philosophy, which consists in formulating a system which will, provisionally at least, organize all other forms of knowledge. But the substitution of elucidated for unelucidated knowledge itself organizes all forms of knowledge, by making it clear exactly what our knowledge involves. Is there any other method of organizing all forms of knowledge? For many logical analysts there is not. The field of scientific knowledge is nowadays so vast that no one person can possibly assimilate it. If we limit ourselves to some particular field there seem to be only two alternatives: either to proceed according to scientific methods, or else to elucidate unelucidated knowledge already gathered in that field.

There is thus no point in speculating more or less vaguely on the implications of various scientific discoveries. If the speculators are philosophers, the value of their speculations is usually vitiated by their imperfect understanding of science; and if they are scientists, their speculations are usually worthless owing to their philosophical incapacity. Speculation on the implications of scientific discoveries is a fascinating way to spend one's time; but the knowledge such speculations give us is knowledge of such small probabilities as scarcely to be worthy of the name. Our knowledge of

the facts in question can either be added to by further scientific analysis, or else elucidated by the methods of logical analysis.

The philosophy of logical analysis implies, of course, that metaphysical propositions are, strictly speaking, *meaningless*, since a proposition has meaning only when we know under what conditions it is true or false. If the meaning of a proposition is its verification, it cannot have meaning unless there is a possibility of indicating how it may be verified or refuted. The propositions of metaphysics, whether of the dialectical or intuitive variety, are admittedly incapable of empirical verification, and hence they cannot give us *meaningful* knowledge.

Belief in the efficacy of dialectical metaphysics is based, as Blumberg and Feigl have so clearly realized, upon the failure to see the tautological or analytical nature of all necessary inference or formal implication. Since deducibility is tautological, the conclusion can not contain logically any more than is asserted in the premises of the argument, in this case empirical sequences. Nor is dialectical demonstration in the sense of a merely probable inference to entities beyond experience permissible. Probable inference is but another name for argument by analogy or by induction. Such argumentation is valid only in empirical questions where the possibility of subsequent empirical verification of the conclusion is present.⁷

Belief in the efficacy of intuitive metaphysics is based upon the confusion of knowledge with immediate non-cognitive experience, as well as upon the ignoring of all logical and empirical factors. Intuitive metaphysics is thus the vain attempt to describe the content of experience, to express the inexpressible, to utter the unutterable—in logical language. Intuitionist metaphysicians have built for themselves a kingdom of metaphor. They have made words their viziers; logically the core of their intuition is a fluent blur.

During the last twenty-five years the denigration of metaphysics has been an important part of the programme of logical analysts

⁷A. E. Blumberg and H. Feigl: "Logical Positivism." *The Journal of Philosophy* XXVIII, 1931, p. 294.

Many of them have taken more or less seriously Wittgenstein's injunction concerning the right method of philosophy, an injunction given toward the close of the *Tractatus*:

The right method of philosophy would be this. To say nothing except what can be said, i.e. the propositions of natural science, i.e. something that has nothing to do with philosophy: and then always, when someone else wished to say something metaphysical, to demonstrate to him that he had given no meaning to certain signs in his propositions. This method would be unsatisfying to the other—he would not have the feeling that we were teaching him philosophy—but it would be the only strictly correct method.⁸

With a fine consistency Wittgenstein then admits that the propositions in terms of which he has led us to understand his theory are themselves propositions which that theory itself condemns as meaningless:

My propositions are elucidatory in this way: he who understands me finally recognizes them as senseless, when he has climbed out through them, on them, over them. (He must so to speak throw away the ladder, after he has climbed up on it.)

He must surmount these propositions; then he sees the world rightly.⁹

At the very moment the reader is prepared to challenge the status of the propositions on which the philosophy of logical analysis rests, he finds that Wittgenstein has unexpectedly done the trick for him. The propositions that have to be expressed in constructing the philosophy of logical analysis are propositions which that philosophy itself condemns as meaningless.

Once Wittgenstein has challenged the meaningfulness of the propositions he has used in constructing the philosophy of logical analysis, he is only one step removed from mysticism. He does not hesitate to take the final step. "Whereof one cannot speak," the *Tractatus* concludes, "thereof one must be silent."¹⁰ The only consistent philosopher is the silent mystic, for the inexpressible

⁸Wittgenstein: *op. cit.*, prop. 6. 53, pp. 187-189.

⁹*Ibid.*, prop. 6. 54, p. 189.

¹⁰*Ibid.*, prop. 7, p. 189.

contains the whole of logic and philosophy. Thus the long and arduous quest for certainty ends, once again, in mysticism.

But, in leading us to mysticism, the philosophy of logical analysis illuminates as never before the real nature of the inexpressible. Philosophy takes us to the inexpressible by clearly displaying the expressible:

Everything that can be thought at all can be thought clearly.
Everything that can be said can be said clearly.

Propositions can represent the whole reality, but they cannot represent what they must have in common with reality in order to be able to represent it—the logical form.

To be able to represent the logical form, we should have to be able to put ourselves with the propositions outside logic, that is outside the world.

Propositions cannot represent the logical form: this mirrors itself in the propositions.

That which mirrors itself in language, language cannot represent.

That which expresses *itself* in language, *we* cannot express by language.

The propositions *show* the logical form of reality.

They exhibit it. . . .

What *can* be shown *cannot* be said.¹¹

Wittgenstein's attitude toward the mystical is the natural outcome of his doctrine in pure logic. But, in spite of their logical impeccability, his conclusions concerning the limits of meaningful communication leave one with a certain sense of intellectual discomfort, as even Bertrand Russell acknowledges. The mind may be left unsatisfied, but I believe that Wittgenstein has offered a brilliant solution of the paradox that has baffled Western mystics in all ages—the paradox of the expression of the inexpressible. He solves this paradox by leading us, through the philosophy of logical analysis, to realize that the mystical can be *shown*, although it cannot be *said*. "There is indeed the inexpressible. This *shows* itself; it is the mystical."

¹¹*Ibid.*, props. 4. 116, 4. 12, 4. 121, 4. 1212, pp. 77-79.

Although Wittgenstein distinguishes sharply between the expressible and the inexpressible, he himself manages to make, toward the close of the *Tractatus*, a number of beautiful comments about the ultimate nature of the world and life:

Not *how* the world is, is the mystical, but *that* it is.

The contemplation of the world sub specie aeterni is its contemplation as a limited whole.

The feeling of the world as a limited whole is the mystical feeling.

For an answer which cannot be expressed the question too cannot be expressed.

The riddle does not exist.

If a question can be put at all, then it *can* also be answered.

Scepticism is *not* irrefutable, but palpably senseless, if it would doubt where a question cannot be asked.

For doubt can only exist where there is a question; a question only where there is an answer, and this only where something *can be said*.

We feel that even if *all possible* scientific questions be answered, the problems of life have still not been touched at all. Of course there is then no question left, and just this is the answer.

The solution of the problem of life is seen in the vanishing of this problem.

(Is not this the reason why men to whom after long doubting the sense of life became clear, could not then say wherein this sense consisted?)

There is indeed the inexpressible. This *shows* itself; it is the mystical.¹²

These piercing statements themselves belong, as Wittgenstein admits, to the realm of the mystical—of what can be *shown* but not *said*. Nevertheless, they illuminate profoundly the nature of the mysticism that flows from the philosophy of logical analysis. They indicate, also, that Wittgenstein himself must have had mystical experiences in their purest form.

As far as I am aware, Wittgenstein's mysticism has never been formally designated or classified. In view of the importance of

¹²*Ibid.*, props. 6. 44, 6. 45, 6. 5, 6. 51, 6. 52, 6. 521, 6. 522, p. 187.

logical syntax in its development, this type of mysticism may appropriately be called *syntactical* mysticism.

Syntactical mysticism has more in common with orthodox Western mysticism than with Oriental mysticism. Theistic Western mysticism is related to the mathematical Logos, while Oriental mysticism arises from the radical empiricism of sensed immediacy. Imbedded as it is in pure logic, syntactical mysticism represents an important development in, and clarification of, Western mysticism, rather than a contribution to Oriental mysticism. In spite of the divergent foundations of syntactical mysticism and Oriental mysticism, it is noteworthy that to many Asian mystics the philosophy of logical analysis is the most congenial of the contemporary schools of Western thought.

VI

Christianity and Contemporary Social Thought

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PREOCCUPATION with social and economic issues is one of the most notable features of our age. Economic theories have emerged from the classroom to stir the emotions and to claim the loyalties of masses of men. The rise of economics into ideological prominence has transformed our whole climate of thought. During the Middle Ages men's minds responded most readily to religious appeals. Then the growing power of the nations of Europe awakened political loyalties, and since the French Revolution national allegiance has often appeared to be more deeply rooted than religious conviction. Today men have transferred to economic systems and social classes much of the devotion that they used to reserve for the Church and the State. As a result, Christianity is now confronted by warring economic doctrines that make demands upon religious conviction similar to its own.

Contemporary with the spectacular battle of the ideologies, a silent revolution has been transforming our conception of the function of the state in economic matters. This revolution has brought about changes similar to those advocated by some of the ideologies of the present, but it has affected even those countries that do not profess adherence to revolutionary ideologies. Chief

among these changes has been the trend toward what we call "the welfare state," and countries nominally dedicated to the idea of free enterprise have initiated measures of social security almost as readily as countries avowedly socialistic.

The Christian has to deal, then, both with economic theories that have become rival religions and with economic assumptions that have influenced the practice of almost every contemporary government.

CHRISTIANITY AND CONTEMPORARY IDEOLOGIES

Political and social ideologies are not new. Almost every great civilization has had its own ideological framework. C. N. Cochrane has pointed out, for example, that we can best understand the Roman Empire not as an institution established for limited political ends but as the embodiment of *romanitas*, a concept we might best render in English as "the Roman way of life." Ideological considerations play a much greater part in social thought today, however, than they did two hundred years ago. Herbert Butterfield suggests that in the eighteenth century politics was regarded as an art or even as a science, having as its function the solution of certain practical problems. It would be impossible so to describe the politics or the economics of the twentieth century. Communism, socialism and capitalism direct their appeals as much to the emotions as to the reason. These appeals awaken a crusading spirit that was once regarded as peculiar to religion.

The systems of the present are economic and political ways of life, not merely techniques of organizing economic and political life. Indeed, ideological loyalties often bear little relation to the techniques of economic organization. Considered as economic systems, communism and socialism are very much alike, and fascism resembles capitalism. On the ideological plane, however, democratic socialists and democratic capitalists recognize that on the fundamentals they stand together against totalitarians of all labels.

An ideology may be defined as a theory that calls forth loyalty. Political ideologies regard systems of government as ends in them-

selves, not merely as means to an end. They tend, therefore, to make for themselves claims to a loyalty that is religious in nature. Many of their adherents reject Christianity, recognizing in it a conflicting absolute claim. Others try to make the Church a tool for the propagation of their doctrines or, sensing that the Church is not so to be used, tell it to mind its own business of preaching the gospel.

Since ideologies are religious rather than pragmatic in nature, their advocates find themselves driven to the formulation of myths that are imposed willy-nilly on society. Communism encourages its followers with the promise of a future when government will be unnecessary, but communism as practised shows no symptoms of being a stage on the road towards such an anarchist utopia. Socialists admit that their immediate programme of nationalization is a cumbersome compromise with their ideal of a co-operative society. Capitalists profess to believe in a free interplay of individual enterprise that has long been outmoded by a complex system of tariffs and trusts. We do well to recognize that a system may be a very imperfect embodiment of the vision that inspires it, and that sometimes the economic reality may even contradict the ideological myth.

In the present clash of ideologies, the first task of the Christian is to distinguish the things of Christ from the things of Caesar. The sacred and the secular can never be isolated from each other, for the city of God has its dwelling in the earthly city, but it is well not to confuse the one with the other. To regard constructions of human skill and science as sacrosanct is to invade the prerogatives of the God who judges man and his works.

The Christian is under obligation to dethrone the ideologies of the present by recognizing in them the elements of idolatry that they contain. Just because he is committed without reservation to the acknowledgement of the lordship of Christ, he will be prepared to deal with many social and political problems in pragmatic terms. He will be able to accept many of the economic arguments of the socialists without identifying the Kingdom of God with any particular social order. He will be able to recognize the advantages of

individual initiative without subscribing to the *mystique* of dogmatic capitalism. He will admit, too, that Christians may legitimately disagree about many questions of economic technique. Above all, he will be delivered from the confusion introduced by political mythology into economic thought.

The average North American readily agrees that the quasi-religious claims of communism cannot be reconciled with the absolutes of the Christian gospel. He finds it more difficult to recognize the elements of idolatry that are apt to infect a "free enterprise" philosophy. As an economic system, capitalism is one of the imperfect ways in which men have contrived to carry on their business. Capitalism is not diabolical, although it has sometimes been used in diabolical ways. Neither is it likely to be permanent. When we regard it as the object of final loyalty, or use Christianity as a means to secure its continuance, we have transformed it into an idolatry.

To affirm Christianity, then, is to deny the false worship of the ideologies of today. But is the Christian verdict upon the political enthusiasms of the modern world merely to be a negative one? Surely not. To say that economic systems are human and temporary is not to say that God has nothing to do with them. Every idolatry that appeals powerfully to men's minds is not a denial but a perversion of the worship of God. Men are seldom led astray by systems that are entirely evil. They are often captivated by systems that distort the good. No doubt the revolutionary ideologies of the present combine the profession of high ideals with subtle appeals to self-interest and with offers of a short cut to utopia. Their most powerful appeal, however, is to idealism rather than to self-interest.

Today men and women of many nations are embracing revolutionary movements that will, they hope, produce a more satisfying way of living. Some of the philosophies that inspire these movements are avowedly anti-Christian, while others ignore religion or treat it as irrelevant. Clearly not every aspect of the revolution of our day is of God. Since God is the God of history, however, He must have something to do with the movements of history. It is

part of the Christian's task to respond to what is of God in the social philosophies of our time, while bringing to bear upon them the judgment of God as revealed in Christ.

The revolutionaries of our time are inspired by a high moral idealism. They demand justice for the poor, and want society to channel its energies into projects that will raise the material standards of hungry people. Their concern for the welfare of all men has put them in the forefront of the fight to root out racial prejudice. Their missionary zeal puts the average Christian to shame, and they are inspired by a millennial hope borrowed directly from Christianity. The Christian ought to be able to recognize in these enthusiasms reaffirmations of his own witness, and in this recognition his own enthusiasm should be rekindled.

In welcoming the assertion of Christian truths in revolutionary guise, however, the Christian will not suspend his judgment or forget the judgment of God. He will recognize that the high ideals of the twentieth century are often pursued without much concern for the choice of methods consonant with those ideals. He will perceive that those who proclaim the worth of every man often treat men as less than human. He will regret that their missionary zeal deteriorates too easily into a mere proselytizing without respect for truth. He will be sceptical of a promised millennium that is to be brought about by men without reference to God. The Christian should be responsive to those tides of the Spirit that are reflected in the revolutionary movements of our time, for he knows that God speaks through history. He will not, if he knows the basis of his faith, be so gullible as to identify revolutionary mottoes with the voice of the Spirit, or to trust for salvation in human movements. The Christian will try the spirits, whether they be of God.

Unfortunately we in North America have often been blind to the spiritual significance of social and political movements in other parts of the world. We dismiss the socialistic experiments that have been made in Great Britain and in other European and Commonwealth countries as misguided aberrations from sound economic practice. India, which has its own revolutionary idealism, we hold suspect as a "pro-Communist" nation. As for Soviet Russia, we

are so well acquainted with the perversions of communism that we are often blind to the truth that has been perverted.

Dr. J. W. Decker of the International Missionary Council remarked not long ago that the nations of the Orient do not share the pessimism prevalent in the west. To us the twentieth century represents imminent peril to the known values of western civilization. Few centuries, however, have been marked by such widespread hope for a better life. It would be a pity if, in rejecting the violence and the tyranny of revolutionaries, we should be strangers to the hope of our time. From the political point of view alone, cynicism about the rest of the world is as unrealistic as gullibility. Those idealists who can see nothing to question in the faltering and unstable government of India and those "realists" who dismiss every iconoclastic government as communistic are equally unsafe guides to political action in today's world. From the Christian point of view, however, what is most serious is the possibility of missing a word that God may be speaking to us in the west through ambiguous but significant prophets.

CHRISTIANITY AND THE WELFARE STATE

As the French Revolution represented the violent phase of a transition to a new type of political order, so the Russian Revolution and other revolutions of our time represent the violent phase of the transition to a new type of economic organization. This change, we have seen, has had ideological overtones. Communism and socialism, the New Deal and technocracy have offered to the people of our generation varying interpretations of this transition and have made competing proposals for controlling its direction. Varied as the ideological appeals have been, however, the actual changes in the economic pattern have been remarkably constant from country to country, and they have affected the practice of governments committed to the most orthodox capitalistic dogma almost as much as that of the most outspokenly socialist states.

Whether we like it or not, we are in the midst of a major change in economic organization. As once feudalism replaced slavery and

in turn was superseded by capitalism, so today capitalism as we have known it seems to be giving way to a new form of social organization. Whether we welcome the "welfare state" or fear the advance of "creeping socialism," we shall in due course have to come to terms with a new way of doing business. The late Archbishop of York has written that "unrestricted capitalism has had its day; it is dead or moribund."¹ Outside North America few would any longer question his words.

It can scarcely be stated too strongly that the social order is changing for economic more than for ideological reasons. Karl Marx was at least partially right when he claimed that social change is the end product of a change in the procedures of production. Feudalism came into being because slavery was no longer feasible in a world where a breakdown of trade and transportation had rendered labour immobile. Capitalism emerged when feudal methods could no longer cope with the volume of international trade stimulated by the Crusades. Collectivism of some kind must be the almost inevitable result of the concentration of industry in units too large to be trusted to individuals or corporations. Economic forces have set the patterns of society. Ideologies have been concerned with the ends that the social order is made to serve.

It is still too early to predict the precise forms that the new economic order will take. Already, however, it is possible to describe some of its underlying assumptions and some of the directions in which it is moving. Many of the features of the emerging society of our time can be summarized by relating them to three presuppositions that have been accepted in practice by almost every government.

First, every man is entitled to the necessities of life. "Freedom from want" is interpreted to mean not merely the avoidance of starvation but the possibility of a measure of self-expression. Nowhere, perhaps, has the welfare state succeeded in assuring such a standard of living to all its citizens, but the provision of this measure of security seems to be its ultimate goal.

¹Cyril Garbutt: *In an Age of Revolution*. Oxford University Press, London, 1952, p. 97.

Second, the provision of social security is not a private matter. It is not the responsibility of the individual alone or of his family but of his employer and, increasingly, of society as a whole. The concept of voluntary charity has been giving ground before that of communal responsibility.

Third, power, like responsibility, pertains primarily to society. Over a long period power has been passing from individual capitalists and small companies to monopolistic corporations and labour organizations, and increasingly to the state.

In practice, recent social changes have resulted in a tremendous increase in the economic activities of the state.

First, almost all governments have instituted schemes of social security on an ever-increasing scale. These include unemployment insurance, workmen's compensation, medical insurance and assistance to various groups, such as the aged and the blind, who have little or no earning power. All signs point to the further development of this type of social legislation.

Second, governments increasingly intervene in the capitalistic process to offset inflation and deflation, by means of strategically timed spending or by the control of money and credit. More than most people realize, governments base their financial policies upon the theories of J. M. Keynes. These theories furnished the basic assumptions of Roosevelt's New Deal, and Bruce Hutchison has called attention to Mackenzie King's use of them. Keynesianism has become practically the financial orthodoxy of the day.

Third, measures of nationalization are still controversial, being advocated by socialists but opposed by capitalists. Be it ever so capitalistic, however, no country is without a multiplicity of government enterprises, and the number of such enterprises continues to grow in relative independence of the philosophy of the party in power. Many people favour the establishment of co-operatives as an alternative to the continued expansion of state activity. The Roman Catholic Church has encouraged them, and in several countries of Europe they control large industries. As yet, however, co-operatives have not radically altered the economic pattern.

Everywhere governments have widened the scope of their activities so greatly that it becomes natural to identify society with the state.

The emergence of the welfare state has been accompanied by remarkable changes in the social attitudes of individuals. We are constantly being reminded that people expect much more of governments than they did formerly. People regard a measure of economic security as rightfully theirs, and they hold governments responsible for providing it. This attitude has meant an altered conception of the family as well as of the state, for social workers report a widespread repudiation of the traditional assumption that members of a family group ought to support each other in times of need. On the other hand, people have undertaken vastly increased responsibilities as citizens. They contribute to each other's support by paying, with remarkably little grumbling, taxes on a scale that would have seemed intolerable to their fathers.

What is to be the attitude of the Christian to the welfare state? He will do well to apply to the economic tendencies of the day the theological approach by which he estimates the significance of its revolutionary movements. He will recognize economic forces as a part of the operation of God's world, not in themselves demonic but subject to human cupidity and love of power, not in themselves redemptive but capable of being put to a Christian use. His vision undistorted by ideological spectacles, he will be able to see that the pursuit of social security will neither destroy what is Christian in our society nor usher in the millennium. He will endeavour to trace the working of God in economic change, and to bring the assumptions implicit in that change under the judgment of God.

Many features of the welfare state the Christian can heartily endorse. He will welcome the extension of the right to life to include some of the amenities that make life interesting and creative. Christianity has always maintained that poverty is no bar to salvation, but it also requires us to treat all men as persons whom God made in his own image and for whom Christ died. The Christian conscience must always suffer when members of God's family are in misery or want, and the Christian heart must go out in love to those who suffer.

The Christian will surely approve, too, the assumption by society itself of responsibility for the welfare of its members. This broadened conception of the functions of society is, indeed, but the secularization of the Christian doctrine of the Church as a body whose members share a common life and contribute to each other's support. One frequently hears the suggestion that the worker of today has too much economic security. Seldom, however, does any man think that he has too much security himself, and those who regret the elimination of economic risks seldom fail to take out life insurance for themselves. The Christian may agree that certain economic risks provide a necessary incentive to individual initiative, but he is bound to insist that the possibility of creative life should be ensured to all men, regardless of their capacity to earn money for themselves.

The Christian should be profoundly grateful that the discovery of advanced techniques has at last brought the conquest of poverty within the bounds of possibility, at least in certain favoured areas. Man was placed in the earth, according to the Book of Genesis, "to replenish the earth and subdue it." The use of legitimate means to lessen or to abolish human poverty is a phase of man's fulfilment of his earthly destiny. Complaints about man's bondage to the machine should not lead us to forget the bondage that the machine has rendered unnecessary. Monotonous and deadening as many jobs on the assembly line are, few would willingly return to some of the monotonous and deadening tasks that the assembly line has rendered obsolete. Some of the noble ideas underlying the mutually responsible society of the present have been made possible by the machine.

In many of its aspects, then, the Christian will find the assumptions of the welfare state consonant with what his faith has taught him. Its humanitarian concern, its sense of social responsibility, its real achievements in the alleviation of want will all commend it. Many contemporary trends remind us, indeed, of features of the mediaeval economy that was cherished and moulded by the Church. The conception of human relationships assumed in

much of the legislation of the present is one with which Christians will feel readily at home.

While rejoicing in the achievements of the welfare state, the Christian will be aware of assumptions and practices that cannot be reconciled with his faith. One of the most dangerous of these assumptions is the belief that security can be provided by material means alone. Trust in material goods is not, indeed, an evil original to the welfare state. One of the worst features of capitalism is its tendency to elevate the economic motive above every other. The universal risk inherent in capitalism has, however, at least inhibited an undue trust in wealth for security. However good the provision of material security for all may be in itself, it increases the temptation to regard the material as a sufficient base of security. Despite the reminder of Jesus that man does not live by bread alone, we often think that we have done our duty to our fellow men when we have provided them with bread. The Christian must insist that there is no security apart from reconciliation with God, and that anyone who claims to offer security on other terms—whether he be a communist agent or a life insurance salesman—is misleading men and blaspheming against God.

The Christian must regret that most people have not yet adjusted their individual moral behaviour to the requirements of a more collective form of society. It is well known that people of undoubted probity in personal relations cheat the government without twinges of conscience, and that even among the respectable the evasion of customs duties has become something of an art. Such people live by a moral code that has become obsolete. If the welfare state is to be more than a mere mechanism of distribution, its citizens must recognize that the responsibilities associated with it impose sanctions upon the conscience as binding as those arising out of transactions between individuals.

The Christian must be uneasy about the tremendous concentration of power implicit in recent economic practice. Many social welfare projects can, no doubt, be effectively undertaken only by the state. If economic forces compel the concentration of power within narrow limits, it is much safer to entrust that power to a democratic

state than to a few individuals. The danger is, however, that people who have entrusted to the state a monopoly of meaningful social activity will come to think of the state as the source of abundant life. When men identify society with the state, they find it easy to believe that man lives for the state. Already there is a tendency, illustrated by contemporary North American educational methods, to regard adjustment to society as the chief end of individual living. There are ominous signs of a trend to social and political conformism that could produce a form of totalitarianism, democratic or otherwise.

The Church itself is not without responsibility for the prevalence of statism. Protestants have often advocated a view of the separation of Church and State that hands over to Caesar almost unlimited sovereign powers and reduces the Church to the status of a voluntary society. Secular writers, taking the Church's estimate of itself at face value, have been quick to assert the natural right to the state to complete control of the schools and of other agencies that help to shape men's consciences. Christians should not allow themselves to be stampeded by fear of secularism into denying the right of the state to assume the responsibilities that it can most effectively fulfil, but they must resist Leviathan when he claims to be the arbiter of ultimate values. God intends the state to be man's servant, not his master.

THE GOSPEL AND SOCIETY

Is it enough for the Christian to deny the pretensions of social and political ideologies, and to subject the trends of the day to a judgment that is informed by the Word of God? Or has he his own peculiar contribution to make to social thought? One intuitively feels that he has, and yet it is not easy to define that contribution. Many economic problems require technical knowledge for their solution, and the Christian's opinion is relevant only in so far as he is an expert. Even in a democratic state, where the people are ultimately responsible for the formulation of policy, many matters must in practice be left to the decision of the man who knows. All

that the people can offer is a judgment after the event. The well-intentioned but unwary Christian who ventures an opinion about a matter upon which he is technically ignorant invites the charge of gratuitous interference that is often laid against him.

The peculiar contribution of the Christian is not surpassing wisdom but an unsurpassable gospel. There are certain vital questions upon which, on the authority of this gospel, he may validly speak. These questions concern primarily the ends that social organization is made to serve, and only secondarily the techniques by which these ends are sought. The expert has a knowledge of methods to which others ought to defer. On questions about the ultimate significance and purpose of social living, however, the expert is a layman like the rest of us. Upon these questions the Christian may speak up boldly.

The Christian view of social destiny may be summarized in three propositions. First, adjustment to society is not an end in itself. Society is made for man, not man for society, certainly not man for the state. God cares for persons, not for collective abstractions. Second, man is made to have fellowship with God. His capacity for such fellowship is the basis of human dignity and the assurance of a significant human destiny. Third, as men know fellowship with God they are involved in a relation of love with one another. Although man is not made for society he fulfils his earthly destiny in society.

Christianity is thus neither individualist nor collectivist, or perhaps we should say that it is both. It values men as children of God, and society for their sake. It posits a society that is neither a statistical total of units nor a herd of ciphers but a community of friends. Christianity has to offer an estimate of personality without which the assumptions and the techniques of modern society are sterile and even dangerous. The Christian pattern of society is the Church as God intends it to be, a body none of whose members can say to the other, "I have no need of thee."

Although Christianity can co-exist with various types of social organization, Christianity is not without its implications for the ordering of society. It is by more than a historical accident that

modern democracy has come to birth within the framework of a Christian tradition. Jacques Maritain has written that "democracy is the only way of bringing about a moral rationalization of politics."² The Christian values democracy as the form of society that leaves to men the greatest freedom for individual development while still offering them the opportunity to grow in a relation of love with God and their fellows.

Unfortunately we are still trying to keep the democratic conception of society without retaining the view of God that makes sense of it. We value democracy for the standard of living that it makes possible or for the latitude that it allows to individual caprice. We do not use it often enough as a means to the expression of Christian freedom and Christian love.

In the shaping of the society of the future, the Christian has his own peculiar contribution to make. He offers, as a Christian, not expert advice about the management of society but good news about the significance of human society in the purpose of God. He insists that God has instituted society for the sake of the men and women who compose it, thereby delivering us from the claims of ideologies to superhuman authority. He points to God as the creator and judge of society, thereby showing up the inadequacy of schemes that offer salvation on human terms alone. He knows through Christ an ethic of love that provides the moral basis for any system of production that developing techniques may make possible. The contribution of Christian faith to social thought may seem intangible, but it alone can ensure an order that will help men to achieve their destiny in God.

²Jacques Maritain: *Man and the State*. University of Chicago Press, Chicago, 1951, p. 59.

VII

"True and Substantial Wisdom"

R. C. CHALMERS

"TRUE AND substantial wisdom principally consists of two parts," wrote John Calvin at the beginning of his *Institutes*; "the true knowledge of God, and the knowledge of ourselves." He further states that these two types of knowledge are so intimately related that we cannot possess a knowledge of the one without also having a knowledge of the other. If this be so, then it is impossible for man to have "true and substantial wisdom" about himself, his society and his world unless he also has a right understanding of God.

• Herein we can see the root of the modern human predicament. Man, in denying God, has "unmanned" himself. He has forsaken the fountains of living waters and hewed out broken cisterns that can hold no water (Jer. 2: 13). But according to Lotze, belief in God "is the indispensable presupposition of all intelligibility in finite things." Apart from God the universe presents a spectacle of incoherence, since it is in Him that all things live and move and have their being. The ancient dictum, *credo ut intelligam* (I believe that I may know), is true. Belief lights up the whole of life with meaning, purpose and significance.

Theology is an ordered presentation of the Christian's knowledge of God. By means of theology witness is borne to the faith, and the beliefs that are inspired by worship are communicated to others.

From the Protestant standpoint we may note that Christianity has at different times and among different persons and groups stressed various aspects of the faith. We do not claim that any one point of view is the whole truth. Nor do we state that any formulations of the truth are unalterable. What we do believe, however, is that theology witnesses to the faith by pointing to Christ Who is the truth beyond all formulas of truth; that He is the living Word of God in Whom is to be found life and wisdom; that He is the visible Incarnation of the invisible God.

This means that Christianity is a religion of revelation. It begins and ends with God seeking man to bring him into fellowship with Himself. Jesus Christ is the culmination of this revelation, the Alpha and Omega of God's search for man.

From our point of vision it appears that man is seeking God. The words of Pascal, however, are a salutary reminder of the divine initiative in matters of faith: "Thou wouldst not be seeking me," said the living Word one day to Pascal, "if thou hadst not already found me. . . . Thy conversion, 'tis my concern." Here is the truth that lies at the heart of the Biblical teaching of divine election and consequently of revelation.

Theology deals with ultimates. Whatever is ultimate is beyond adequate expression in finite forms. Doctrines are "intimations of a great mystery." While this mystery can be expressed truly, it cannot be expressed wholly, in formulas. Hence our need to be on guard against permitting the language of theology to become fossilized, or making the formularies of the faith a substitute for faith itself. This is idolatry. Faith is personal, not propositional. All our expressions in theology are subject to the judgment of God. Theology is God's servant and the Church's instrument for conveying divine truth to men.

We live in a theological age. Ideologies and 'isms and the appearance of new cults from time to time testify to the religious nature of man. And wherever we find religion, either true or false, we discover some form of theology, that is, some formulation of belief about what people conceive to be ultimate. In a day like ours, when men are giving themselves in devotion to anti-Christ,

Christian theology must be vigilant to direct men to the living Christ.

There is a theological ferment in the Christian Church today. Old doctrinal moulds are being broken and new attempts to express the faith in more meaningful ways are to be seen on every hand. There is also evidence that some theologians are endeavouring to build systems of doctrine.¹ All this is to be welcomed because it reveals an awareness of the living God, an awareness which alone can keep theology from becoming a museum of antiquated ideas. We will have more to say about this theological renaissance later in this chapter.

The theological atmosphere within the Church reveals a great deal of apathy and ignorance concerning matters of the faith. The present writer does not take a pessimistic attitude towards the situation within the Church—or in the world at large for that matter. But if we are realistic in appraising the situation within the Church with respect to doctrine we must acknowledge that there is much teaching to be done, much discipline to be inculcated, much truth to be apprehended—and all in a measure that we at present only dimly comprehend.

But there are also theological forces within the Church today which, because of some of their aspects, lead us to question both their value and validity. These theological forces can best be described as tendencies rather than schools of theological thought. We shall mention three such tendencies in modern Protestantism.

There is the anti-rational tendency. For instance, Karl Barth, taking his cue from Kierkegaard that "God is in heaven and man is on earth," and that there is "an infinite qualitative difference between time and eternity," goes on to stress the "radical discontinuity" between God and man, in spite of the Incarnation which would appear to unite God and man through Christ's redemptive act for sinners.

According to this tendency faith has no relationship with reason; revelation is the antithesis of philosophy. "What has Athens

¹e.g. Karl Barth.

to do with Jerusalem?" asked Tertullian long ago. Tertullian also described faith as believing that which is absurd. It is this influence which we see in this anti-rational strain today in theology. God is so transcendent, so "Wholly Other," that not even the Incarnation can bridge the gulf between God and man. Here we see religion divorced from an important segment of life, the rational, and all because of the fear of an autonomous rationalism which would make God into an idol of man's imagination.

Some words of Pascal are apropos here: "If we submit everything to reason, our religion will have no mysterious and supernatural element. If we offend the principles of reason, our religion will be absurd and ridiculous."

Then there is also an anti-historical tendency in Protestant theology. In our time we can see this tendency to some degree in Reinhold Niebuhr's use of myth. For him myth, such as in the narrative of Genesis 3, is a way of describing the timeless in the temporal. It is a means of expressing the inexpressible, a manner of referring to the real behind the actual. As such the mythical stories in scripture should be taken seriously but not literally. It is by means of myth, moreover, that Niebuhr conveys to men, in a historical setting, the significance of those truths that are "beyond history." But is there not a danger inherent in this method of treating scripture in terms of meaningful myth that the vital historical elements in the Christian revelation may be lost?

Or again, we see a similar anti-historical trend in the writings of Paul Tillich. Tillich shows evidence of docetic tendencies with respect to Jesus Christ. He writes of Him as "the Jesus Who is the Christ," or "Jesus as the Christ." For Tillich the basis of the Christian faith is not the historical person of Jesus of Nazareth. He believes it is possible to dispense with the historical Jesus, though that is not necessary. It is, for Tillich, the "Jesus Who is the Christ," Who is the foundation of the faith of the Church. Historical data concerning Jesus are apparently irrelevant. But, we may ask, how do we know this Christ unless we also know Jesus of Nazareth?

It is in Rudolph Bultmann's writings, however, that we discover docetism in a full-blown modern form. This German theologian believes that the message of the New Testament must be "de-mythologized," or better, "re-mythologized," if it is to appeal to the mind of today. And while Bultmann would not reduce Jesus of Nazareth to a mythical figure, nevertheless he is unconcerned about the biographical details of His life. He claims that we know next to nothing about a real, historical person called Jesus of Nazareth. All we have in the gospels, he believes, is a record of the faith of the early Church. The "eschatological Christ" is the only figure we really know from the reading of the New Testament.

It is one thing to reinterpret the message of scripture so as to make it meaningful to the modern mind. That is the preacher's task every Lord's Day. But it is quite a different thing so to "demythologize" the scripture that we are left with a Christ Who is a phantom, a Being we know not how to describe, a divine person who has not really become Incarnate "for us men and for our salvation." Bultmann's Christology is not the Christology of the main trend of Christian thought throughout the centuries. The Church has always believed that Jesus Christ was really born, lived, taught, suffered, died and rose again. Moreover, the Church has claimed that these historical data were a significant aspect of the message of redemption which spoke of God coming as the Incarnate One to rescue man from sin. Bultmann and his followers are theologically "off the track" and the sooner we recognize that fact the better it will be for the witness of Christian theology in contemporary history.

A third tendency to which we will direct attention we may describe as that of theological isolationism. It is concerned, in some instances, with a theology of the Word, but not the Word made flesh. It is theology in a vacuum. It is manifest in the type of preaching that considers that all that is necessary to convey the Word of life to men is to repeat the correct Biblical terms or pious phrases and men will believe. Such preaching is unmindful of the

problem of communication that is involved in translating the Word into the words of modern men.

Theology can only come alive as it is directed towards, and is involved in, the life of the Church and the world in which men work and live. Instead of theology being isolated we need a theology that is incarnate. In other words, theology must proclaim the faith that Jesus Christ is Lord both of the Church and of the world. The gospels tell us of One Who was involved in human life, even to a Cross. A theology that claims to manifest the truth of this involvement must itself be involved in the struggles and sins and hopes of men.

There is a renewed interest in theology today. The appearance of several new theological journals in recent years, such as *Theology Today*, *Scottish Journal of Theology* and the *Canadian Journal of Theology* are indicative of the rising tide of theological concern in the English-speaking world. Moreover, theologians of note, like Tillich and Niebuhr, are popular writers in the best sense of that abused term. Current periodicals such as *Life* and *Time* often carry theological articles of considerable length and depth. The theologian has a hearing today such as he has not had for many generations.

It is beside our purpose to deal with the causes of this widespread interest in theology. Undoubtedly the increasing interest in religious matters, the crisis of Western culture, the ecumenical movement and other factors have all played their part in fostering this doctrinal concern.

Accepting this theological interest as very real we must embrace this opportunity and claim it for the cause of the Church and the Kingdom of God on earth. This will involve a rebirth of theological interest in the Church itself, and especially among Church leaders, to a degree beyond our calculations.

Men are asking theological questions today: what is man? what is wrong with man? should economic forces be permitted to control our lives? These and many other questions require theological answers. This means that the theologian has a

responsibility to the ordinary person that is unprecedented in our time.

A good example of how a current secular problem must have a theological answer is seen in Professor Grant's chapter. He gives an appraisal of the welfare state from the Christian point of view. He points out that there are "many features in the welfare state that the Christian can heartily endorse." But Professor Grant is also "aware of assumptions and practices that cannot be reconciled" with the Christian faith. "One of the most dangerous of these assumptions is the belief that security can be provided by material means alone." The final solution to this problem raised by the welfare state must come from theology. It is from the Christian evaluation of man and his life that we learn that man's ultimate security is to be found in God alone.

The theological renaissance of our day has made some splendid contributions to the religious and moral thought and life of men. The revival of Biblical theology has given many people a new appreciation of the depth of scripture. The various schools of theological thought—Existentialism, Neo-Orthodoxy, Liberalism, Fundamentalism, and the New Supernaturalism—all in their own way have contributed to the theological discussion that is now going on. This discussion is bearing fruit. We believe it must continue.

However, a considerable portion of recent theology has been more corrective than constructive. It has sought to correct former emphases in theology, such as humanism, immanentism, subjectivism and rationalism, and in so doing it has gone to an extreme of the opposite sort. These corrective theologies have been both necessary and valuable. But they should not be stopping places for theology. Rather, taking into account the contributions of recent theology, the theologians of the immediate future must carry their discussions a step farther. They must go beyond the stage of being corrective and take a more constructive view of their task. To the consideration of what we believe to be some essential ingredients of this more constructive type of theology we will now direct our attention.

To begin with, the question might be asked: what should we expect of a constructive theology?

We believe that the answer to this question is that such a theology should preserve, clarify and interpret the faith so that man may understand how it is related to his own experience and vocation, and believe it with conviction. Thus the constructive theology which we need should correlate the faith with the totality of life.

Such a constructive theology, we believe, must lay stress on the six points set forth in the next few pages. No attempt will be made to show all the ramifications of these theological emphases. Nor are these points exhaustive of the constructive theology we envisage in the future. They only show the direction of such a theology—and nothing more. They are suggestive, rather than exhaustive, of Protestantism's theological future.

First, Trinitarian theology. In Part 3 of C. N. Cochrane's book² we are introduced to the Trinitarian teaching of Athanasius and Augustine and its influence on classical culture during the years when "the glory that once was Rome" was waning. The author points out that the doctrine of the Trinity was to these men the arché, the first principle or starting point for the renewal of a bankrupt civilization. This teaching that the Godhead was a Trinity in Unity was not obscurantist; rather it clarified thought. It offered men "an intellectual, no less than a moral and spiritual, release." The Trinity became the doctrine whereby men were emancipated from the rigidities and frustrations of pagan naturalism. In the teaching of the Trinity there was to be found "a principle capable of saving the reason as well as the will, and thus redeeming human personality as a whole."³ It was by means of the doctrine of the Trinity that Augustine introduced into pagan Rome not only a new physics and a new ethic, but also a new logic.

The doctrine of the Trinity, by its affirmation of God the Father, explains to men that the world was created by a good God. Hence matter is not inherently evil. The universe belongs to God

²*Christianity and Classical Culture.*

³*Ibid.*, p. 384.

and He sustains it throughout. By the affirmation of God the Son we learn of the divine Logos or reason taking our human nature upon Him, dignifying our human existence and manifesting in human form the rational order of the world as based on love. And, by its affirmation of God the Spirit, the Trinity tells us that the world is permeated by intelligence and love. These are not three different Deities. They are Three in One—distinct but conjoined in One Being, God, Whom we worship as Father, Son and Holy Spirit.

The Trinity is the most inclusive doctrine of Christianity. It has emancipating power in our day, even as it had long ago. Its implications for faith are very far-reaching.

Take, for instance, this dualism that has appeared from time to time in Christian teaching between faith and reason. As Cochrane points out,⁴ Augustine, no less than Tertullian, believed in the priority of faith, without thereby, like Tertullian, discrediting reason. What Augustine revolted against in reason was its rationalistic self-sufficiency, so manifest in pagan philosophers. If faith precedes understanding, then it is in faith that man finds his birthright as a rational being, since God, the author of faith, is the ground of true rationality. Augustine perceived that "so far from being antithetic, 'faith' and 'reason' are in reality correlative and complementary aspects of experience."⁵

One thinker in our time who has turned his attention to building a bridge between philosophy and theology, reason and faith, is Paul Tillich. By what he terms "the method of correlation" he endeavours to span "the infinite gap between man's spirit and God's Spirit." He believes there must be a positive relation between them, since reason, as well as faith, is of God. Philosophy should raise the questions and point to the problems concerning man and his existence. Theology must give the answers to these questions. In other words, the thought and problems of the age must be correlated with the affirmations given by theology.

That a tension will always exist between the philosophical approach to truth and the theological exposition of truth can be

⁴*Ibid.*, p. 400.

⁵*Ibid.*, p. 400.

taken for granted. But this should be a creative tension wherein philosophy ministers to faith instead of being opposed to it as in most forms of contemporary philosophy. Too much of modern philosophy is monistic, while a considerable amount of present-day theology is dualistic. Both monism in philosophy and dualism in theology widen the gulf that separates faith and reason. What is needed is another Origen to lead us to see the ultimate unity of true philosophy and theology.

We are not attempting to offer a solution to this age-long theological problem of the relationship of faith to reason. But we believe that the solution lies through a deeper apprehension of the truth of the doctrine of the Trinity. Reformed theology has laid stress on the message of redemption, thereby emphasizing the sinfulness of man and the saving grace of God. What Reformed theology must do also is stress the doctrine of Creation. The God Who is our Redeemer in Jesus Christ is the same God Who has created man and the world. Therefore the sinfulness of man's nature and the evil in the world should not lead us to disparage either our human nature or the world, since both belong to God and are sustained by His Almighty hand. It has often been pointed out that Barth is weak on the doctrine of Creation. Within recent years he has taken this criticism so seriously that he has devoted two large volumes of his *Dogmatics* to this doctrine. In these volumes there is sufficient evidence to show that Barth has amended some of his earlier strictures against human nature.⁶

If we accept the Trinitarian formula that God the Creator and Father is the same God Who has come to us as our Redeemer and also the same God Who sanctifies us through the Holy Spirit, then whatever difficulties we may have about the relationship between reason and faith, or creation and redemption, we must realize that these difficulties are in us and our view of Reality and not in the truth which is in God.

We can see another implication of Trinitarian religion when we let its light shine on our world and its scientific pursuits. If God is

⁶See "The New Barth," by Emil Brunner, *Scottish Journal of Theology*, June, 1951.

Creator and Upholder of all things, then science must speak to us of Him. When it does not, we often put the blame on the scientist who is not able to see God at work in His creation. May it not also be the fault of the theologian whose God is too small, too restricted and too isolated to embrace science within His purview?

Here again an unnecessary dualism is often found between the discoveries of science and the revelation of faith. Fred Hoyle, like Laplace before him, finds no sign of God in the universe. At the same time some religious philosophers and theologians think about the Creator and His creation in a manner that would lead Christians to believe that they had nothing to learn from modern science. We believe both attitudes are mistaken.

Professor Hogg's chapter makes clear that the universe is still in process of creation. New worlds are being formed. This is no "cabin'd, cribb'd, confined" order, set to work only in one groove for all eternity. Creation is continuing. What the theologians, therefore, must make plain is that this scientific truth of continuing creation in no way contradicts the Christian concept of the Creator. The Biblical view of God is dynamic, not static. His work never ends, according to Jesus (John 5: 17). He is forever revealing new light to those who have eyes of understanding and faith to discern the light.

Moreover, the religious explanation of the origin of the universe by a Creative intelligence Who transcends creation, even while He is immanent in it, in no way contradicts the scientific account of the universe. In fact, the religious explanation, we believe, makes the scientific understanding of the world much more meaningful. To accept, for example, the steady-state explanation of the origin of the universe, as mentioned at the close of chapter one, does not necessarily deny the reality of the Creator. Rather, the Christian would say that according to our present knowledge this is the mode or manner that God used to bring creation into existence. It is this fact that is often overlooked by those well-intentioned, but ignorant, pious souls who rebel against the theory of evolution. They forget that evolution, whether cosmic or

biological, explains nothing in an ultimate sense. Evolution only tells us of the "how" of nature's working, not its "why."

Further, since the Christian affirmation respecting God is that He is Mind or personal Spirit, it is well to realize that such an affirmation can fit into any scientific cosmology. In other words, belief in the living God as the ultimate explanation of the universe in no way restricts us to a particular scientific (or unscientific) theory respecting the manner of either the origin or the working of creation. To the Christian the "laws" of nature about which science speaks are the means God ordains to control His world. In the universe there is both flexibility and order, life and regularity. This is what we should expect to find in a world that is under the control of a personal Intelligence Whose nature and Whose Name is Love. In fact, since our incarnate Lord is the Christ in Whom "all things hold together" (Col. 1: 17), we can understand something of what St. Paul meant when he wrote that "the whole creation has been groaning in travail" (Rom. 8: 22), waiting to be delivered from "its bondage of decay and obtain the glorious liberty of the children of God" (Rom. 8: 21). In other words, Christ's work of redemption has cosmic as well as human significance. This could only be true within the context of a Trinitarian concept of God from which we learn that the Divine agent in creation, the Word or Son, is the same One Who redeems us from sin (Heb. 1: 2, 3).

William Temple⁷ has pointed out that this is a sacramental universe. God's Spirit pervades everything from the lowest form of life to the highest. It follows, therefore, that Christians are called to glorify God in everything. There must be no disparagement of scientific pursuits. Neither must we regard secular affairs as if they were diabolical in themselves. If such affairs do become evil in their effects it may be because of religious isolationism which at times attempts to shut off whole areas of God's world from His influence and thereby permits finite, secular forces to manifest demonic power. What we must affirm, through the doctrine of the Trinity, is that God is the Lord of all.

⁷*Nature, Man and God*, Chap. 19.

In Principal Taylor's chapter it is stated that modern psychology deals with man in the totality of his being—body, mind and spirit. Christianity ought to deal with men likewise. According to Professor Ross, many people appear to be split personalities inasmuch as there seems to be no relationship between their religious beliefs and their daily actions. Such people believe in God but His existence seems to make no difference in their lives. Why? Several answers may be given. However, it is more than probable that many people have received a theological interpretation of Christianity which separates their secular living from religion and thus creates a gulf between their vocation and their faith in God. If this is so, then the Church which has fostered such teaching has to bear some of the blame for modern secularism, that attitude of mind which considers God to be irrelevant to secular affairs.

For the proclamation of the truth about the God with Whom we have to do; for the sake of bridging the chasms between the unnecessary dualisms that are found in modern life, and for the sake of bringing the whole of life to glorify His Holy Name, we must reaffirm, reinterpret and show the relevance of the Christian doctrine of the Trinity—One God, Father, Son, and Holy Spirit.

Second, a constructive theology must be a theology of revelation. From what has been written above it will be clear that the present writer does not conceive of revelation in any narrow or segmented manner.

Christianity stands or falls with the fact of revelation. By revelation we mean that God has spoken, that He has unveiled Himself. God is unfathomable but He is not unknowable. The doctrines of Creation and Incarnation make it plain that God has taken the initiative in manifesting Himself to men.

To affirm revelation is to affirm the "givenness" of the basic facts of our religion. God Himself has acted in history. He called unto Himself a people out of whom there came in the fulness of time the Redeemer who is the true revealer of God. Revelation is thus seen to be personal. In revelation it is God Himself who speaks to men.

The late Professor H. R. MacKintosh⁸ has distinguished between primary and remedial revelation, the former manifesting itself in nature, history and the moral consciousness of man, and the latter, which is more important, in Jesus Christ. Moreover, it is Jesus Christ Who gives meaning to the primary revelation and manifests to us the Father in His redemptive love.

One of the strong points of the recent upsurge of Biblical theology is its emphasis on the primacy of revelation. This "strange, new world of the Bible" has made its readers understand afresh that it is God Who is speaking through its pages and man must obey. And this matter of revelation in Christian theology makes us realize that while there are differences of interpretation of the faith within the Church, yet the ground of our faith is not in man but in God. It is God Who has acted with saving power in Jesus Christ. Revelation assures us that theologies and philosophies may come and go; the emphasis of one age will give place to another emphasis in a different age; but the rock on which our religion is founded abides forever.

Third, a constructive theology must give a significant place to the fact that man is sinful. Reinhold Niebuhr has referred to "the easy conscience" of modern man. Man is a sinner but he will not acknowledge it. Niebuhr's criticism of liberalism is largely on this point. The liberal thinks of man as essentially good. This, says Niebuhr, shows the Hellenic (or Renaissance) influence in our culture. But the Hebrew-Christian view of human nature makes plain that man, created in God's image, is a fallen (or falling) creature.

Sin, according to Niebuhr, is not merely a matter of evil acts. It is a condition of man's life in time. No matter how high a person may rise in the moral scale of being new temptations assail him.

The essence of sin, according to Niebuhr, is pride which manifests itself as pride of power, pride of learning, pride in one's goodness, and pride in being religious—the worst of all forms of

⁸*The Christian Apprehension of God*, chap. 3.

pride. Niebuhr believes that pride can manifest itself at every level of human experience. He is, therefore, the opponent of perfectionism which is that point of view which holds that it is possible for man to enter a stage in history when he is free from evil. In the social field this perfectionism becomes utopianism, to which Niebuhr is equally opposed.

Tillich also stresses the demonic factor in human life. Such a factor is not evil in itself—it may even be good. But when it becomes an end in itself, when it controls a person's life so that this temporal factor—country, money, power, etc.—becomes the chief end of life, then God is displaced and man takes over the direction and supervision of his entire life.

Many questions are raised by the views of sin and evil set forth by both Niebuhr and Tillich. For instance, Niebuhr claims that sin can "be overcome in principle but not in fact"—a statement that does not clarify our understanding of his concept of sin.

However, our purpose is to show that these theologians have brought back into Christian thinking an emphasis that was long overdue. Man is a sinner and he cannot save himself. Only divine grace can forgive man's heinousness and save him in his helplessness. It is in returning and rest in the Lord that we find our peace and health.

One thing that modern man must learn from the Christian view of sin is that sin is ultimately committed against God. Sin is, therefore, a religious term. It has personal and sociological consequences but it is essentially rebellion against our Creator.

Laying stress on man's sinfulness must not be regarded as making a pessimistic estimate of man's life. Sin in the Christian sense only has meaning within the larger context of grace. Therefore such terms as pessimism and optimism can help us very little in understanding human nature from the religious point of view. Man sins because he denies God's image and thereby asserts his independence of God—his proud self-sufficiency. It is because man can "rise" in spiritual stature that he can also "fall" from the height of his creation. Indirectly sin teaches us of man's dignity. "Man's unhappiness," wrote Thomas Carlyle, "comes of his great-

ness; it is because there is an infinite in him, which with all his cunning he cannot quite bury under the finite.”⁹

Fourth, a constructive theology must be ethically relevant. One thing we can learn from Christian existentialism is that a man must act. He must obey God’s voice uttered in the situation in which he finds himself. The moment calls for decisions. Abstract theorizing is not permissible.

Christianity made an impact on Graeco-Roman society and transformed its values. It did so because its ethic was rooted in theology. This theology asserted that God is love. This love is redemptive and sacrificial. It is a love like that of a Father Who cares for His children. It is a love that is willing to be crucified for others. This love is holy and righteous. It is the antithesis of sentimentalism, since it is moral and partakes of the nature of God.

Herein is the reason why our theology must be ethically relevant. God’s nature demands it. “Thou shalt love” is a divine imperative which flows from the very nature of God as revealed in Jesus Christ. For a man who believes in the Christian revelation of God, a personal and social ethical witness becomes obligatory.

Therefore all self-contained forms of piety and abstract types of theology are ruled out beforehand as un-Christian. Theology does not speak of God’s will “in vacuo.” It speaks of God’s will for men and for the world in which we live.

It is a Christian affirmation that Christ has given us freedom from the law. But Christ has given us this freedom not to deny the import of the law but to fulfil it by going beyond it and walking the second mile of service. Christ has made us free in order that we may be truly responsible.

Moreover, theology can only be ethically relevant when it clarifies for man the divine estimate of man’s own nature. “What is man that Thou art mindful of him?” is the question the Bible raises and answers by telling man that he is made a little lower than the angels. We must do good to men, act responsibly towards our

⁹*Sartor Resartus*, bk. 2, chap. 9.

fellows, oppose injustice and plead for human rights because God's love goes out towards our neighbour. He has been created and redeemed by God. What higher motive is required in order that we should love him?

When we turn to our world today and see the problems and the evils that confront the human race some may wonder what these have to do with theology. But when we look at Christian theology in all its depth and breadth we can realize afresh that it has something to say to man in every condition of his life. Whether it is war and strife, race prejudice or economic injustice, the ethic of the gospel will be able to give direction and inspiration because Christians can discern in this ethic the voice of Him Who said, "Go thou and do likewise," calling men to obedience. The constraint of this voice of love ought to help us to make our theology more ethically relevant.

Fifth, a constructive theology must clarify its understanding of the nature of the Church.

One of the most heartening things that has happened in recent theology is the attention that is being given to the doctrine of the Church. Books by the score on some phases of this doctrine have come from the press. It is undoubtedly true that the ecumenical movement is partly responsible for this serious effort now directed towards understanding the nature of the Church.

Every conference of the ecumenical movement on Faith and Order from Lausanne to Evanston has pointed out that the crux of our disunity as Christians is to be found in our differing conceptions of the nature of the Church. The most broadly-based division, according to Amsterdam, is that between "protestant" and "catholic," the personal and the authoritarian, the Biblical and the traditional. But there are many distinctions and divisions within these two broad, general groups. Whether or not there will be more mergers of Protestant churches in the future will depend, in part, on the views held by Protestant Christians respecting the nature of the Church. Some claim that since we are one now in Christ all we have to do is "keep the unity of the Spirit in the bond

of peace" (Eph. 4: 3). Others believe that there can be no spiritual unity apart from bodily, organic unity. There are differences also between and within various communions respecting the ministry and the sacraments, and these also arise from varying opinions with respect to the nature of the Church. How these differences are to be finally resolved no one can tell. But one thing is certain: Christians are being constrained to think afresh about what they mean by the Church and in so doing they will come to see anew the role of the Church in the world.

In the New Testament the Church is considered to be a fellowship, the Body of Christ, the Bride of Christ, the building of which Christ is the indwelling life. These are some of the images of the Church whose significance must be thought through by Christians in our day.

Yet at the same time the Church in the New Testament is a human organism, partaking of the frailties of our nature, as Paul found in the Church in Corinth. The treasure is in earthen vessels. But this treasure is there for the purpose of showing that the excellency of the power to renew human life is of God and not of man.

We can be certain that any concept of the Church that is in accord with New Testament teaching will make it plain that the Church belongs to Christ. It is His creation "by water and the Word." He purchased it at a great price. Christ is its Head, its Foundation, and its Hope. Through the power of the Holy Spirit He rules it for His own glory. None other than such a high theological view of the Church is consonant with that set forth in the New Testament.

One of the reasons why much theological thinking and writing today turns around the doctrine of Christ is that Christians are being forced to see that their conception of the Church largely rests upon their view of Christ and the fellowship He creates and sustains.

The Council of Chalcedon formulated the two-natures doctrine of the person of Christ, the properties of each nature being preserved in the One Person of the Incarnate Son of God. As John S. Whale¹⁰ points out we have here in this orthodox doctrine of the person of

¹⁰*The Protestant Tradition*, p. 330ff.

Christ a clue to the solution of our problem concerning the nature of the Church. Instead of following the Monophysite and stressing the divine nature of the Church to the virtual exclusion of the human, thereby creating a priesthood which makes for itself "the most exalted pretensions," or on the other hand, following the Ebionite and stressing the earthly character of the Church to the virtual exclusion of the divine, thereby practically eliminating "the dimensions of the supernatural and the eternal from its on-going life," we can find in the formula of Chalcedon the way out of our dilemma by conceiving of both natures bound together in a perfect unity. When we arrive at that stage of thought concerning the nature of the Church we will then do justice to both the Protestant Reformation principle and catholic truth.

Sixth, the constructive theology of the future must be undergirded by a positive eschatology.

The theme of the Evanston Assembly of the World Council of Churches was "Christ the Hope of the World." Many books and articles were written around this theme. One thing Evanston did show was the confusion in Protestant thinking concerning this matter of Christian hope. Evanston, therefore, served a very good purpose in arousing Protestantism to rethink its eschatology.

Eschatology means the doctrine of last things. It is a doctrine that theological liberalism has by-passed for the most part. This reveals the superficiality of liberal thought concerning one important aspect of Christian truth.

Eschatology is not simply an extra tacked on to a system of Christian theology to show that everything will come out all right in the end. Eschatology, rather, asserts the presence of the Alpha and Omega at work now in the Church, indwelling and empowering the gospel in all its aspects. Eschatology is a buttress to our faith in Jesus Christ, the eschatological person, the Incarnate One in whom eternity and time, God and man, are united.

One of the great eschatological concepts of the Bible is the Kingdom of God. It is not a social order primarily; it is God's reign among men, centring in His Church. This Kingdom has a

past, a present and a future dimension. All three are significant. Christ has come; Christ is coming; and Christ will come again to reign in glory in His Kingdom. This is the Christian hope.

Eschatology brings before us various images or pictures concerning this "end"—the resurrection, the last judgment and future glory. But all these pictures, which are symbolic attempts to describe the indescribable, find their central inspiration in Jesus Christ Who must reign and be all in all.

The theological relevance of this eschatological faith is far-reaching. For instance, it is eschatology that gives Christianity a goal—the consummation of God's Kingdom. This goal is not simply in the future; it is also in the here and now because Christ is present today. When we work in obedience to Him we know that we have already "tasted the powers of the coming age." Moreover, it is eschatology that is the antidote to despair. Earthly systems may come and go but, as Augustine discerned by faith, the City of God remains. Kingdoms rise and wane but the Kingdom of God stands forever. All this gives us confidence as we make our ethical witness for God and the right. We may not always be successful in overcoming injustice. But we have the confidence of knowing that in the "end" injustice will be cast down forever. Our responsibility as Christians, therefore, is not to be successful but to be obedient to Him Who is King of Kings and Lord of Lords. Without such a theological foundation religious faith cannot abide in these times that try men's souls.

In this chapter we have looked at the significance of theology, the climate of opinion in which it is involved, and some theological tendencies which we believe are "off-centre" in some respects. Then we outlined some special emphases which we believe should be given a place of prominence in Protestant theology today and tomorrow.

One question remains: is the Christian revelation final? If it is not, then all that we have said about a constructive theology for Protestantism is in vain, since such a theology is rooted in Christ, the Word of God.

There are at least two reasons why the Church must take this question of the finality of the Christian revelation seriously. One reason is found in the eclectic movements of our time. There are forces which would endeavour to make an amalgam of all the great religions, reducing them to a common denominator—colourless, lifeless, and without grace. This movement is stimulated by various notions such as, "let all religions unite to save the world from Communism"; or, "one religion is as good as another." When we find a historian of the prominence of Arnold Toynbee following this eclectic line we have to take notice of it, even though G. K. Chesterton described eclecticism as "religion going to pot."

The other reason why we must give this question of the finality of the Christian revelation more consideration is because of the theological discussion within the Church whether any revelation worthy of the name is to be found outside the Biblical, Hebrew-Christian tradition. This exclusive trend is represented in the Neo-Orthodox school of theology.

In replying to the question stated above we must note that by "final" we do not mean coming to a full stop. The finality of the Christian revelation must be conceived dynamically, not statically. Nor do we mean by "final" that the Christian revelation is the only revelation to the exclusion of revelations in other faiths. We believe, with the writer of the Epistle to the Hebrews, that "God, Who at sundry times and in divers manners spake in times past unto our fathers by the prophets, hath in these last days spoken unto us by his son, whom he hath appointed heir of all things" (Heb. 1: 1). Moreover, because of our belief in the Holy Spirit, "the Lord and Giver of life," we are confident that God will continue to reveal to us the "things of Christ." He has still more light and truth to break forth from His Holy Word.

When we speak of the Christian revelation being final we mean that it is normative. In the Christian revelation we have a standard or criterion by which all religion is judged. In this light of Christ, we believe, we shall see light.

How shall we consider, then, this matter of revelation in other religions? We believe that it is Christ, "the light, which lighteth

every man that cometh into this world" (John 1: 9), Who would welcome truth wherever it is found, even as He praised the faith of a Roman Centurion in the days of His flesh. Moreover, the truth to be seen in other religions must be inspired by the same God Whom Christ reveals, for all truth is a unity.

When we speak of the finality of the Christian revelation we mean that Christ is unique. No other religion can point to its founder and state that he is the perfect, sinless Lord, as Christianity does. Thus the finality of the Christian revelation is not the finality of the Church institution or of its theology, but the finality of Christ Who is, in Himself, the Christian revelation. Where is there any like unto Him? When we consider such a question the statement that "one religion is as good as another" sounds meaningless. Only one religion proclaims Jesus Christ as Lord. Only one revelation refers to Him as "very God of very God . . . and was made man." It is because of Him that we believe that the Christian revelation will not be superseded. He is the express image of God's person. In Him we see the Father. Since this is so, according to Christian teaching, there can be none other like Him, or any other revelation of God that will contradict the revelation we have in Christ.

This is not arrogance on the part of Christians. The believer in Christ is left with no other alternative than to proclaim His Lordship. But if Christ is "the heir of all things" then we can look upon other religions as part of the "*preparatio evangelica*" which Christ fulfils.

The reason we cannot accept the Neo-Orthodox position with respect to revelation in ethnic religions is because it emphasizes a discontinuity between God and history. It is one more evidence of theological isolationism. Christianity is then a religion separate from a large area of life and faith—not a religion of fulfilment at its centre. "If there be no knowledge of God apart from that given in the historic Jesus," asks W. Norman Pittenger,¹¹ "how is it that we know Deity when found in Him?" This truth is also stressed by William Temple who affirms "that unless all existence

¹¹*Theology and Reality*, p. 207f.

is a medium of revelation, no particular revelation is possible; for the possibility of revelation depends on the personal quality of that supreme and ultimate Reality which is God." According to this writer we must not detach particular revelation from the universal quality of revelation. When we do so particular revelation then "loses its root in the rational coherence of the world." The consequence is that particular revelation "becomes a superstition and a fruitful source of superstitions."¹²

It would appear that in seeking to give glory to Christ the Neo-Orthodox school detaches particular revelation from universal revelation as seen in other faiths, and thus not only "becomes a superstition and a fruitful source of superstitions" but also detracts from Christ's cosmic and universal significance as Lord of all, the Logos in Whom all fulness dwells.

The request asked by Philip long ago, "Shew us the Father" (John 14: 8) is fundamental. Men want to know whether or not God is a God of fatherly love. No amalgamation of the religions of the world will help man to discover this truth. It is Christianity alone that affirms the fact that God is a Father Who redeems man from sin. The reply of Jesus to Philip remains true: "He that hath seen me hath seen the Father" (John 14: 9). Other religions speak of God or of a divine Being. They possess a general, undifferentiated revelation, such as Paul refers to in Romans (1: 19, 20). But no man can come to a belief in the Fatherhood of God except through Jesus Christ for the simple reason that Christ alone teaches the truth of God's Fatherhood. Further, we see God's Fatherhood manifested in Christ, the only begotten Son.

Thus while we can gratefully receive whatever contribution of value may come from ethnic faiths, we nevertheless hold to the teaching that "there is none other Name under heaven given among men whereby we must be saved" (Acts 4: 12). There is thus no possibility, from the Christian point of view, of looking ahead to the coming of a syncretistic movement that will produce some universal religion in which Christ is simply one leader among others. He is Lord of all or He is not Lord at all. This must be our confession of

¹²*Nature, Man and God*, p. 306f.

faith, for no other confession is consistent with the Christian experience of His Lordship, with the testimony of the Church through the ages, and with the witness of the scriptures. In Him we find that "true and substantial wisdom" because He conveys to us the knowledge of God and the knowledge of ourselves. He is the God-man.

With respect to the finality of the Christian revelation the Church's task is clear: she must share this revelation with others. At the very heart of the Christian revelation is the missionary constraint which would urge Christians to go into all the world and preach the gospel. But it is only as the Church herself has a vital theology founded upon the Christian belief in God, man and the world, that she will be empowered to carry this saving revelation to the uttermost ends of the earth.

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